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ENERGY AND WATER DEVELOPMENT APPROPRIATIONS FOR FISCAL YEAR 1985

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

UNITED STATES SENATE

NINETY-EIGHTH CONGRESS

SECOND SESSION

ON

H.R. 5653

AN ACT MAKING APPROPRIATIONS FOR ENERGY AND WATER DEVELOPMENT FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 1985, AND FOR OTHER PURPOSES

PART 3 (Pages 1315–2004)

NONDEPARTMENTAL WITNESSES

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ENERGY AND WATER DEVELOPMENT APPROPRIATIONS FOR FISCAL YEAR 1985

MONDAY, APRIL 2, 1984

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:08 a.m. in room SD–192, Dirksen Senate Office Building, Hon. Pete V. Domenici presiding.

Present: Senators Cochran, Mattingly, Domenici, Stennis, and Andrews.

NONDEPARTMENTAL WITNESSES

OPENING REMARKS

Senator DOMENICI. The hearing will come to order. We have many witnesses and very little time, so we would appreciate it if any of you in the audience desire to talk among yourself, do that outside so we can hear the witnesses. We have about 15 witnesses in an hour and a half this morning, so we are going to try to expedite things. In the absence of the chairman of the subcommittee, Senator Hatfield, I have been asked as a member of the subcommittee to preside over this session today.

Senator Hatfield expresses his regrets that he can't be here. However, on behalf of the chairman and the subcommittee, I want to welcome each of you to this hearing today. As I indicated, we have many witnesses who wish to be heard. Therefore, in accordance with our notification to each of the witnesses, it will take some self-restraint on the part of everyone to hold our oral testimony to a minimum in order that all of you who have requested an opportunity may be heard.

I will promise you that self-restraint will be mutual. The Chair won't talk much either if you will be brief and to the point. So in keeping with those wishes, I ask that you have your detailed statements ready and they will be made a part of the record and carefully reviewed by this subcommittee. The staff does a wonderful job on this subcommittee.

Also, in this way, we will have a carefully detailed record so that anyone who is not present will be able to arrive at an independent judgment. If each witness will summarize or highlight the important points in his oral testimony, it will be most helpful to the Chair, in an effort to accomplish a great deal in a short period of time here today.

Having said that, we welcome our first group of witnesses. We are most pleased to have present the distinguished Senator from the State of Arizona, Senator Goldwater.

I assume, Senator, that you would like to quickly introduce the witnesses that are with you; is that correct?

Senator GOLDWATER. That is correct.

Senator DOMENICI. Would you do that, please.

I notice that former Congressman Rhodes is here.

I assume, Congressman, that you are going to have something to say? It will be brief? You are used to that in the House in any event.

Mr. RHODES. If I say anything, Mr. Chairman, it will be very brief, but I will probably just want to associate myself with the remarks which the Governor will be making.

Senator DOMENICI. We are delighted to have you.

Senator Goldwater, you may proceed.

CENTRAL ARIZONA PROJECT

STATEMENT OF HON. BARRY GOLDWATER, U.S. SENATOR FROM ARIZONA

Senator GOLDWATER. Thank you, Mr. Chairman. In a way, I am glad Senator Hatfield couldn't make it, because you are from the same part of the world that we are from and you have a great understanding of what lack of water really adds up to. Before I introduce the Governor, I might say we have gone 84 days now this year without a drop of rain and our annual intake out there is only 7 inches. Without rain, even the trees are looking around for dogs. [Laughter.]

I feel honored to introduce the Governor, although we have no allegiance to the same political faith. He is one member of the opposition party that I am always proud to be with, happy to be with. His family and my family are probably among the oldest non-Indian, non-Mexican families out there, and I have known him and his family all of my life. He is doing a wonderful job—that is off the record. [Laughter.]

Senator DOMENICI. Strike that, please. [Laughter.]

No, we won't do that.

Senator GOLDWATER. It is a real honor and a great pleasure for me to introduce Governor Babbitt to this committee and to pay recognition to the fact that former Congressman Rhodes is also with us. I thank you, Mr. Chairman.

Senator DOMENICI. Thank you very much. It is a pleasure to have you here. Governor, you may proceed. It is good to have you with us.

STATEMENT OF BRUCE BABBITT, GOVERNOR OF ARIZONA

ACCOMPANIED BY FORMER U.S. REPRESENTATIVE JOHN RHODES

Governor BABBITT. Mr. Chairman, thank you. Let me just say at the outset my affection and esteem of Senator Goldwater is mutual and entirely on the record. I am very pleased to have him here today. I acknowledge the presence of Congressman Rhodes and Wesley Steiner who is second only to Reed Reynolds in longevity, handiness, and skill among western water engineers.

Mr. Chairman, just to review briefly the status of the Central Arizona Project, progress continues to our great satisfaction on the Granite Reef aqueduct that is now moving toward completion, and there will be water in Phoenix in 1985 by the construction to the agricultural areas of Pinal County continues and will be very satisfactory. That is progressing under the cost-sharing system of last year. Distribution systems are being built, 20 percent local participation, which has been forthcoming. The project is moving very well. The emphasis, the focus from this year forward will be on two features as this project now begins to move to completion.

TUCSON DIVISION CONSTRUCTION

The central emphasis for the next few years will be the construction of the final leg of that acqueduct into Tucson. We are very concerned about that and very interested in progress on schedule because, as you know, Tucson is the largest city in the world with no surface water supply whatever. Tucson is living on borrowed time with ground water overdraft and I can't overemphasize the importance of this project reaching the city of Tucson in timely fashion at the end of this decade.

REGULATORY STORAGE AND FLOOD CONTROL ACTIVITIES

Beyond Tucson, the final piece of this project will be the regulatory storage and flood control in the Phoenix area. As you are aware, Mr. Chairman, that phase of this project has been the subject of considerable debate and discussion over the last 3 or 4 years, principally in the form of a search for an alternative to the Orme Dam feature that was a part of the original Central Arizona Project. We now have a strong consensus throughout Arizona for the alternative that is known as Plan 6. We anticipate Secretary Clark will make an announcement concerning Plan 6 flood control, regulatory storage, and related features tomorrow.

FUNDING RECOMMENDATION

It is with that background that I say to you and to the committee that we have only a few changes that we would propose to the President's budget. The President has proposed, on behalf of the executive branch, an appropriation of $187 million. We believe that is close, but we ask your consideration for an extra $14 million, a small increase to go to two areas. One is the Tucson aqueduct. It is our feeling that the Tucson aqueduct has the capability within the Bureau of Reclamation to spend about $63 million—it will be an additional $12 million—which would keep the Tucson aqueduct on schedule toward its 1990 completion date. We would also request an extra $2 million above and beyond the President's request for the preconstruction and design features of Plan 6 in Maricopa County.

This is the configuration of Roosevelt Dam on the Salt River, the construction of Cliff Dam on the Verde, and beginning of the New Waddell storage feature west of Phoenix. That is an important feature. It is the first year we have asked for money for preconstruction and design for Plan 6 and we believe it to be important that we invest a small but very significant sum of money in the beginning of that phase of the project.

Mr. Chairman, anticipating the question that might come from New Mexico, I hearby reaffirm Arizona's steady and unwavering and complete support for the Orme Dam feature contained in the original authorization for the Central Arizona Project.

PREPARED STATEMENT

With that, we, on behalf of all Arizonians, express our gratitude to the committee, to the U.S. Congress, and to you personally for your assistance.

[The statement follows:]

STATEMENT OF GOV. BRUCE BABBITT OF ARIZONA

Mr. Chairman, and members of this very important committee, I appreciate the opportunity to once again appear before you in support of funding for the continued construction of the Central Arizona Project. I assure you that the El Nino experience of last year did not wash away our great need for the Colorado River water which will be delivered to us via the project.

The administration's budget proposes $187.6 million for CAP construction in fiscal year 1985. This level of funding will permit first deliveries of Colorado River water to the Salt River Valley late in 1985 and into Pinal County in 1986 and will leave a requirement for only modest expenditures to complete the Granite Reef and Salt-Gila reaches of the aqueduct system in subsequent years.

The administration's budget calls for greatly increased construction activity next year on the final leg of the aqueduct system—the Tucson aqueduct—but stops short of the level which we believe will be necessary to assure that project water can be delivered to Tucson as scheduled. No city in the project service area has a greater need for the water and yet the schedule has slipped in recent years. In order to recoup some of the slippage, to insure no further delays, and to enable the Bureau to continue its excellent work to full capacity, I would urge that the committee increase the level of appropriation for the Tucson aqueduct from the $51.7 million in the President's budget to $63.7 million.

After many years of investigation and negotiation, strongly differing views concerning how to meet the regulatory storage and flood control requirements of the CAP have been resolved. Secretary of the Interior Bill Clark recently announced completion of the environmental evaluation process and is expected to soon select plan 6 as the replacement for the controversial Orme Dam feature of the CAP. I met recently with Secretary Clark and urged him to proceed in fiscal year 1985 with the design and the preconstruction activities on all three features of plan 6—reregulation of the project water supply imported from the Colorado River in the New Waddell feature and water conservation and flood control in the enlarged Roosevelt and new Cliff structures on the Salt and Verde Rivers respectively.

Mr. Chairman, I know that you are most familiar with the dams on the Salt River and, once again, wish to express my appreciation for your help in dam safety development.

I am pleased that the administration's proposed budget includes an item of funding for the preparation of designs and specifications and other preconstruction activity involved in providing regulatory storage for the CAP. But the need for flood control on the Salt River in the Phoenix metropolitan area is so great that I am compelled to ask the committee to include an additional $2 million in the appropriation for fiscal year 1985 with directions to the Secretary that he commence design and preconstruction of the Roosevelt and Cliff features concurrently with similar work on the New Waddell feature.

I recognize the problems of budgeting under prevailing economic conditions. But, I call your attention to the fact that Arizona will begin repaying construction costs to the

Federal Treasury only when water starts flowing in our ditch. I'm sure you, as our banker in this instance, would like to see that day arrive as soon as possible, just as we would.

Early last year the Secretary finalized the allocations on project water among 85 municipal and industrial water users, several Indian reservations, as well as non-Indian farm irrigators. That action made it possible to proceed with the next step—subcontracting for deliveries and cost repayment.

More than 50 percent of the project water allocated for non-Indian irrigation was contracted for within the first 2 days that contracts were available. Those districts which have already signed contracts—or will in the near future—have accepted the cost-sharing obligation that goes along with the delivery systems loan fund provided for in section 309(b) of Public Law 90-537 as it was amended last year by the Congress.

Contracts will soon be offered to municipal and industrial users, many of which are already constructing their treatment plants to be ready to take the water in late 1985.

The Central Arizona Project has been under construction since 1972. The 180-mile Granite Reef aqueduct from the Colorado River into the central part of Maricopa County is nearly complete. Water deliveries via that segment of the project are scheduled to begin late in 1985.

Believe me, it is an exciting time for Arizona as the day nears when the water will actually flow in the aqueduct that we have hoped for and planned for for so many years. Many years ago, when the project was more dream than reality, we thought of the water as a new supply to be added to what we had already developed from local surface and ground water sources.

This is no longer the case. Today we recognize the hard fact that the CAP supply is to be used in substitution for the dwindling ground water resources upon which we depend, at our own peril, for something like 60 percent of our total water production.

That the project supply will be used to reduce our dependency on our precious ground water is guaranteed both by our master water delivery and cost repayment contract of 1972 and by our State ground water management law enacted by our legislature in 1980.

To summarize Arizona's plea, we are anxious to begin repaying the cost of building the Central Arizona Project. We desperately need the water it will provide. We urge you to appropriate the funds for continuing construction requested in the President's budget plus an additional $14 million to expedite construction of the Tucson aqueduct and the plan 6 features of the Central Arizona Project.

PREPARED STATEMENT OF SENATOR D'CONCINI OF ARIZONA

Senator Domenici. Thank you, Governor.

I am also informed that Senator DeConcini has submitted a prepared statement for inclusion in the record. Without objection, that will be included.

[The statement follows:]

STATEMENT OF SENATOR DECONCINI

Mr. Chairman, as always, I appreciate the opportunity to testify before the Energy and Water Subcommittee on Appropriations in strong support of adequate funding for the continued construction of the Central Arizona Project. Year after year, I have impressed upon this Committee the vital importance of this project to the citizens of Arizona and the future well-being of our state. I thank the Chairman for the strong support I have received from him and other members of this Subcommittee and for their clear understanding of the value of this Reclamation project. The water to be derived from the Colorado River via the system of aqueducts, canals and pumps of the CAP will allow Arizonans to enjoy a quality life without the fear of an insufficient water supply to meet even the most basic domestic needs ever looming. Every public official in Arizona recognizes the critical nature of completing this project in a timely manner and is committed to insuring the delivery of Colorado River water to the Phoenix and Tucson metropolitan areas on schedule. I am sorry I am unable to be with you today to introduce Governor Babbitt who has been one of the most outspoken supporters of the CAP. I am sure, however, his testimony will, as usual, underscore the strong concerns of the people of Arizona.

Mr. Chairman, I note the Administration has requested a total of $187 million for the Central Arizona Project in fiscal year 1985. With this level of funding, the Department of the Interior plans to maintain its commitment to deliver Colorado River water to the Phoenix area by late 1985, and water to the Tucson metropolitan area by 1991. While this funding request certainly appears impressive, Mr. Chairman, my concern is and has been whether or not funds necessary to meet these deadlines in FY 85 and beyond will be sufficient to keep the project on track. Water is one of the most precious of our natural resources. We have a responsibility to use it wisely and put it to its best uses. When I look back on the heavy flows that poured down the Colorado last summer as a result of an abnormal snowmelt, it seems a shame that instead of being put to beneficial use, this resource caused an inordinate amount of property damage and loss of income to individuals and businesses all along the river. If the CAP had been operational last year, including the Plan 6 regulatory storage facilities, the State of Arizona could have conceivably utilized or stored every drop of water the pumps at Lake Havasu would have been capable of delivering and at the same time reduce flood damages. This year again we have a situation on the Colorado where there is more water than can be used. Once again, this precious resource will be wasted. It is imperative, Mr. Chairman, that with the occurrence of these types of events, that the CAP be completed on schedule so that our State can make use of this valuable resource.

When the President's budget request was made public and I reviewed the Bureau of Reclamation's funding request for the CAP, I was disappointed that it did not include additional construction money for the Tucson Aqueduct. A little over a year ago, the Bureau of Reclamation provided me with a "Best Case Scenario" on future year funding capabilities for the CAP. Reclamation at that time indicated it could spend $104.9 million for the Tucson Aqueduct, including $10 million for construction activities on Phase B in FY 85. The request before this Committee, however, Mr. Chairman, only includes $52 million for the Tucson portion of the project. This request falls far short of the estimate on capability of a year ago. While there may be some very legitimate reasons for the reduction, and the Bureau has stated that it can now save approximately $300 million on the total cost of the Tucson Aqueduct than what it had originally planned, it does raise many questions in my mind as to whether the project can and will be completed on time. Additionally, if the Bureau expected to have the capability to utilize $105 million in FY 85 a year ago, I cannot understand why the Bureau should not have the capability to spend anything above the $52 million contained in its request.

The City of Tucson's water supplies are growing less and less each year. The citizens of this community firmly believe they will be receiving their share of water from the Colorado River in 1991. With these thoughts in mind, Mr. Chairman, I would urge the Committee to carefully review the effects of the requested funding level and give serious consideration to increasing the level of appropriation for construction on the Tucson Aqueduct, Phase B in FY 85.

As you know, regulatory storage for the CAP is an integral part of this overall water delivery system. Judge Clark is expected to announce his final decision on a plan for CAP Regulatory Storage tomorrow. The Administration's budget includes $7.2 million for preconstruction activities for Plan 6, the plan identified by the Bureau of Reclamation as the preferred alternative for regulatory storage and flood control in central Arizona and the alternative to Orme. Plan 6, which includes the construction of New Waddell and Cliff Dams, and modification to Roosevelt and Stewart Mountain Dams, is also the alternative supported by the State. The Committee is well aware of the importance of Stewart Mountain and Roosevelt Dams to the safety and welfare of the citizens of Phoenix. The Safety of Dams work on these structures, including modifications to increase storage capabity, must move forward as quickly as possible. New Waddell Dam is a critical component to the economical operation of the CAP. Again, I would urge the members of the Committee to carefully review this portion of the budget request and give serious consideration to increasing the appropriation for preconstruction activities for Regulatory Storage in FY 85.

Mr. Chairman, the citizens of Arizona are depending on the operation of the CAP to supplement our dwindling ground water supplies. In order to maintain the schedule set forth by the Bureau of Reclamation to provide water deliveries to Indian and non-Indian users, it is imperative that we move toward final completion as expeditiously as possible. Thank you, Mr. Chairman.

INTRODUCTION OF SUPPORTING WITNESSES

Senator DOMENICI. Now I understand that you have others with you who have statements which you are going to submit to us. Would you identify yourself, please?

Governor BABBITT. I have with me. Mr. Chairman, the State water engineer, Wesley Steiner. I would like simply to submit for the record a supporting statement from the Metropolitian Water District of Southern California and a statement from the Central Arizona Water Conservation District.

Senator DOMENICI. They will all be made a part of the record.

[The statements follow:]

STATEMENT OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

The Metropolitan Water District of Southern California supports the administration's 1985 budget request for appropriations for the Central Arizona Project. This project which was authorized in 1968 after many years of effort now represents one of the most significant public works programs undertaken by the Bureau of Reclamation. It is an excellent demonstration of the Federal-State partnerships which have brought sound economic and social development to the West and will permit one of our fastest growing States to meet its needs for water for its homes, industry, and agriculture.

This year will represent a milestone for the Central Arizona Project. Present plans are to begin testing of the system from Lake Havasu on the Colorado River into the Phoenix area in anticipation of making first water deliveries in 1985. With the central Arizona area's continued dependence on ground water pumping which has seriously lowered ground water levels, surface water deliveries from Arizona's Colorado River entitlement will be extremely important to protect its economy. The administration's budget request will keep the project on schedule.

We urge your committee's approval of this appropriation.

STATEMENT OF THE CENTRAL ARIZONA WATER CONSERVATION DISTRICT

I am Dale Shumway, president of the Central Arizona Water Conservation District. This statement is presented on behalf of that district which is the entity under contract with the United States to repay the major portion of the reimbursable costs of the Central Arizona Project. Within the last year, the district has begun to maintain the completed portions of the project under contract with the United States. We also anticipate moving into project operations as soon as the systems are proved operable.

Our interests in timely completion of the project facilities are real and immediate. We appreciate the identification of $187.6 million for CAP in the administration's budget request. This level of Federal funding, coupled with the many millions recently committed to CAP through local bond issues, will go far toward timely completion of the project. However, we feel that additional money is needed to maintain an optimum construction schedule. We support 100 percent the request of our Governor, Bruce Babbitt, for a 1985 appropriation of $201.6 million for CAP. An appropriation at this level is essential to move the project forward on a schedule that meets the commitments which the Federal Government has made to the citizens of our area.

After years of searching for the suitable alternative to Orme Dam, we now appear to be ready to move forward with this important project feature. Additional funds for this feature will expedite the realization of major water supply and flood control benefits for a major portion of Arizona's citizens.

I'm sure that our concerns will be given full consideration by the committee. Thank you for the opportunity to present those concerns to you.

Congressman Rhodes, would you care to comment at this point?

Mr. RHODES. Just to say the chairman of the Central Water Conservation District is here, Mr. Dale Shumway, and his mother, Elizabeth Salomon Shumway, who has never been to Washington before. They are in the audience.

Senator DOMENICI. Where are they?

Please stand. Thank you very much. We are delighted to have you.

Mr. RHODES. I thank you, Mr. Chairman, for your kind attention.

Senator DOMENICI. You are most welcome.

Mr. RHODES. And for the kindness which I know you will show us in the days to come. Bless your heart.

BUDGET CONSIDERATIONS

Senator DOMENICI. We have so much money to spend. Debts are just as small as ever, more money to spend. Let me ask the Governor a couple of questions.

First, thank you for your testimony. It was brief and to the point. I understand there is more information in your detailed remarks. I think we all should know that the largest request for any water project in the year's budget is the $178.6 million for this project. That is good news, I think, for you all. The project is about 50 percent complete, a $3.1 billion project. I think your State is very fortunate and the project is very fortunate to have very significant bipartisan, congressional support.

You are asking that we increase this budget, and I am not trying to make a big deal out of a little deal. It is not very much to ask and in normal years that would probably be done with little or no consternation on this committee's part, but if there is a determination that the discretionary program should be cut back in 1985 as part of a deficit reduction effort, would you support reductions in the appropriations for the Central Arizona Project?

Governor BABBITT. Mr. Chairman, I would never support a reduction willingly with respect to the Central Airzona Project. On the other hand, if I am told that the best we can get in aid to peace, harmony, and consensus in the U.S. Congress is a given figure, I would simply tell you what we have always said and that is that we have had strong and reasonable treatment in this Congress. You will not hear us badmouthing the efforts of the U.S. Congress. We are very grateful for what you have done. We will make our case as vigorously as we can and we will accept the results with as much grace as we can muster, reminding you, of course, that New Mexico's water projects have been completed and we are in a hurry to see ours completed.

Senator DOMENICI. We are so pleased that we didn't need very much or that we didn't get very much. In any event, Governor, I really appreciate your answer. I don't think the committee is interested in significant reductions in the particular area, but if we are put in the position where a few hundred million dollars out of a few billion take on some kind of symbolic meaning where other aspects of the budget will be reduced if they are, obviously we will be extremely fair as we have been in the past.

If you have nothing further, we thank you very much for your testimony. Thank you very much, Senator Goldwater.

Governor BABBITT. Thank you, Mr. Chairman.

FLORIDA WATER RESOURCE PROJECTS

STATEMENT OF AL BISHOP, CHIEF, BUREAU OF WATER MANAGEMENT, FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Senator DOMENICI. Our next witness is going to be Mr. Al Bishop, chief, Bureau of Water Management, for the Florida Department of Environmental Regulation.

Mr. BISHOP. Good morning, Mr. Chairman.

Senator DOMENICI. Mr. Bishop, before you proceed, let me ask those who are leaving if they would do so expeditiously and let us get on with the other witnesses. Thank you very much.

PREPARED STATEMENT OF SENATOR CHILES OF FLORIDA

Senator Chiles has a statement which will be placed in the record at this point.

[The statement follows:]

STATEMENT OF SENATOR CHILES

Mr. Chairman, I am pleased today to have this opportunity to offer my support for the State of Florida's unified budget request for its water resources development program. Each year, all water-related proposals eligible for Federal assistance are submitted by State and local project sponsors in Florida to the State Department of Environmental Regulation where the projects are carefully reviewed and extensively analyzed. I commend our State for its efforts to coordinate a State position on these important water projects. I emphasize this, Mr. Chairman, to point out that what Florida is asking for today in terms of Federal assistance is not a grandiose wish list. Rather, it represents the product of analysis and scrutiny and reflects what is an appropriate level of Federal participation in meeting State-related water resource needs. I hope this subcommittee will act favorably on this funding request.

The total request for the State of Florida's fiscal year 1985 program for water resource development is $72,255,000. Included in this program are requests for flood damage prevention projects, navigation and beach erosion studies and projects, and important study initiatives for environmental restoration and enhancement. While the State will provide detailed testimony on the program, I would like to call attention to a few components of the State's package.

I have had a long-time interest in working with the Suwannee River Water Management District in securing funds to help collect the necessary data to help preserve and protect the Suwannee basin area. I hope the committee will agree to funds to continue these ongoing activities.

On several occasions I have asked this subcommittee for its assistance in securing funds for the Port Canaveral project in Florida. Most recently I have expressed my concern that the administration is inappropriately delaying this project. The port authority has provided detailed information on this situation to the subcommittee and I hope we can find a way to resolve the problem so the construction of the west turning basin can finally move forward.

I am pleased this subcommittee was willing to address the issues surrounding Everglades National Park in conjunction with last year's supplemental appropriations bill. I look forward to working with the committee in determining what needs to be done further to address the water-related needs of this important park resource so dependent on water flow for its livelihood.

Again, I want to commend the State of Florida for its work in developing the fiscal year 1985 public works program and ask that this subcommittee act favorably on these funding requests.

FUNDING REQUEST

Mr. BISHOP. My name is Al Bishop with the Florida Department of Environmental Regulations. Secretary Tschinkel would normally be presenting this testimony to you. However, an unavoidable schedule prevented her from being here. We do highly regard this opportunity to bring to you testimony as part of a unified program of public works and she has asked me to represent her today.

This program does have the strong support of Governor Graham. It has been thoroughly reviewed by the State Resources Management clearinghouse. We do have a detailed statement and will submit that for the record which describes the projects that I will just briefly touch upon in much more detail.

The total request for fiscal year 1985 funding for flood control, navigation, beach erosion control, environmental restoration, and enhancement projects, both construction and studies, totals just over $72 million. There are some projects I would like to emphasize briefly, as I said.

SUWANNEE RIVER BASIN STUDY

The first is the study of the Suwannee River basin which will allow us to obtain a great deal of information which is needed to preserve and protect this major unspoiled Florida river. The study has been funded for the past 3 years but was not included in the President's budget for this year. We are disappointed in this omission and we ask you to take a close look at this study and restore funding for it.

APALACHICOLA-CHATTAHOOCHEE-FLINT RIVER STUDY

A study that is not incorporated in our booklet but which is also included in the President's budget is a section 308 study on the Apalachicola-Chattahoochee-Flint River system. There has been a considerable strengthening of support between Alabama, Georgia, and Florida in evaluating water budget and water management strategies for this system. This is the type of study we feel will be extremely beneficial and we will be following up with a letter requesting formal incorporation in our unified program.

CANAVERAL HARBOR, FLA.

In the area of navigation, the Port Canaveral project is also been omitted from the President's fiscal year 1985 budget, although it was funded last year. We strongly support the $11.3 million to be appropriated for this project. We also very strongly support funds to complete the Miami River cleanup study. Polluted sediments in the navigation channel are apparently causing some very serious water quality problems, both in the river and perhaps extending into Biscayne Bay, which is also a project in our program that I will touch upon briefly later. We would support the funds necessary to complete that study.

BEACH RESTORATION PROJECTS

In the area of beach restoration, obviously Florida has a great interest there as we have more miles of coastline than any other State except Alaska. Many of our beaches are suffering erosion problems. Of course, we recognize on many of these problems are natural erosional and depositional processes. Fortunately, Florida has in place a residents program to set standards and limitations on coastal construction and we are receiving some beneficial results. But the damage that has been done already must be corrected and we must look to the future to avoid similar types of problems taking place there.

One new study request that we are currently seeking authorization for is the Florida statewide beaches study. This would look for preventing rather than correcting problems and will give us much needed information to determine wise management of the coastal processes and avoid the types of correctional problems that we have had in the past.

Also, the Panama City beach nourishment project which is included in the budget at the $400,000 level; we feel this level is inadequate. At this pace, the planning and engineering studies will require at least 5 years to complete and that is a danger of the data being out of date before completed. We feel this is an important project and we recommend at least doubling the amount that is recommended for that project.

One of the major goals in our unified program effort is to include more projects in the area of environmental restoration and enhancement. These types of projects are particularly important to Florida. They give us an opportunity to correct previous destructive practices that threaten the water and related resources in a State where these are the primary drawing cards for the tourist industry and we also feel it is very important to the State as a whole. We are a very fast-growing State and there are many increasing demands being placed on these water resources, the same resources that bring U.S. tourists to our State.

EVERGLADES NATIONAL PARK FLOODING STUDY

Governor Graham has initiated the plan in the Florida Everglades which is a major State commitment toward preserving and restoring one of the Nation's most unusual and valuable ecosystems. We appreciate the cooperation we have received from the South Florida Water Management District, the Corps of Engineers, and from Members of this Congress. We are most appreciate of that, but more more cooperation will be needed in this joint local-State and Federal program to preserve this ecosystem for future times.

Altered water discharge schedules to Everglades National Park, land acquisition in the park's buffer areas, re-use of the Shark River Slough flow-way, and flood protection for east Everglades homeowners are all important aspects of this program.

As I mentioned earlier, this is a study on the Biscayne Bay in Dade County. We are requesting funding to continue that study——

Senator DOMENICI. Mr. Bishop, could you defer for 1 minute, I have to take a telephone call. I will be right back.

[Pause.]

Senator DOMENICI. You can proceed, please.

Mr. BISHOP. The Golden Gate Estates restoration study, along with the Six Mile Cypress Strand studies that have been included in our program in the past and funded in the past. Unfortunately, no funds were included for them in this year's administration budget. We urge you to look closely at these studies, at the environmental benefits that were accrued from these type of projects, and restore the needed level of funding.

As in the past, we have included an appendix which contains a resolution by Florida's Governor and cabinet that recommends the deauthorization of the Cross Florida Barge Canal and also total participation in restoring a portion of these already constructed works.

In conclusion, I would like to point out that the program that we are presenting here today represents what we consider to be our basic needs. In order to be included in this unified program, projects must be reviewed and approved by State and local agencies within Florida. As you are considering the budgetary process, which we recognize you must go through, bear in mind we bring to you what we consider to be our basic needs. We appreciate the opportunity to present this testimony to you. If there are questions, we will be glad to respond.

PREPARED STATEMENTS

I would like to recognize the members of the Canaveral Port Authority, Chairman M. M. Buchanan, Commissioner Dave Nismith; port director, Charles Rouan; and director of engineering, Joseph Mahola.

We would like their full statement placed in the hearing record, along with the more detailed presentation which we have submitted.

[The statements follow:]

STATEMENT OF VICTORIA J. TSCHINKEL, SECRETARY, FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Mr. Chairman and members of the Subcommittee, I am Victoria Tschinkel, Secretary of the Florida Department of Environmental Regulation. We are very pleased to have this opportunity to discuss with you the State of Florida's Fiscal Year 1985 Program for Water Resources Development. Governor Graham strongly supports this unified program, and it has been thoroughly reviewed by the State Resources Management Clearinghouse. Our program is summarized in a booklet that provides cost data, project descriptions, project justifications, and location maps for each of the projects in the program. I have submitted copies of this booklet and my prepared statement for the record.

Included in our Fiscal Year 1985 program are 8 flood damage prevention, 14 navigation and 14 beach erosion control projects (either construction or general investigation studies). Also included are 5 studies in the area of environmental restoration and enhancement. The total request for Florida's Public Works Program is $72,255,000.

FLOOD DAMAGE PREVENTION

In the category of flood damage prevention, the Central and Southern Florida Flood Control Project and the Four River Basins Project are, by far, our largest. These projects include the State's two largest urban areas, where water resources must be managed to keep pace with continued population growth and the needs of Florida's fragile natural environment. Full funding at the level indicated is necessary to meet program needs.

Our project request also includes funding to initiate the recommended alternative for the Upper St. Johns River Basin. The St. Johns River Water Management District is the local sponsor of this portion of the Central and Southern Florida Project and has been developing with the Corps of Engineers a range of alternatives to deal with the complex problems in this basin. These alternatives have stressed the importance of non-structural solutions to water management problems and are designed to include consideration of the value of wetlands and other environmentally sensitive areas.

Several water management studies are included in Florida's request. The Central and Southern Florida Water Supply Study should be completed in FY 85. The funds requested for the St. Marys River and the Suwannee River Basin Studies will allow continuation of efforts to preserve and protect these important interstate rivers.

These river basin studies will provide state, regional and local levels of government the information they must have to wisely manage floodplains, but they have not been included in the President's proposed budget. We are very disappointed in OMB's failure to recommend appropriations for this type of study. Efforts like these are far less costly than later, remedial flood control works.

NAVIGATION

Florida is doing a great deal with its own resources to enhance port utilization. We are now evaluating the spoil disposal problems faced by Florida's ports and are seeking long-term solutions to these problems. We can now issue 25 year maintenance dredging permits and assist our ports financially in acquiring upland spoil disposal sites.

The ongoing project to deepen Tampa Harbor to 43 feet is a major component of our navigation program. With over 42 million tons of cargo moving through its facilities annually, Tampa is Florida's largest port and handles more phosphate shipping than any other harbor in the world. Navigation funding would also allow needed deepening at Port Manatee and Port Canaveral and preconstruction planning for Gulf Coast Passes and Ft. Pierce Harbor.

The Port Canaveral Project deserves special mention. The project is not included in the President's FY 1985 budget, even though it was funded in FY 1984. The Corps' favorable feasibility study has been stopped in the Office of the Assistant Secretary of the Army. We recommend that $11.5 million be appropriated for this important project.

Funding is also requested for continuing navigation feasibility studies for Escambia River Channel, Mexico Beach Inlet, Miami Harbor and Port Sutton. In addition, there are several requests for new studies, including Clearwater Spoil Disposal, Jupiter Inlet, Lower St. Johns River Enhancement, and Port Canaveral.

We strongly support funds to complete the Miami River Cleanup Study. Polluted sediments in the navigation channel apparently are causing serious water quality problems in the river, perhaps extending into Biscayne Bay.

BEACH RESTORATION

Florida has more miles of coastline than any other state except Alaska, and many of our beaches are seriously eroding. The opportunity to visit Florida beaches is a prime asset to our tourism industry. Natural erosion has been severely aggravated by existing development and, ironically, by previous attempts to alter these erosional and depositional processes. Fortunately, Florida's program to establish standards and limitations for coastal construction is achieving beneficial results. However, the damage that has already been done must be corrected in order to provide protection from storms and to restore adequate recreational beaches for the millions of tourists who visit Florida each year.

Florida's request for FY 1985 funds includes beach restoration projects located in Lee County, Dade County, Palm Beach County, Duval County, Indian River County, Monroe County, Bay County, Pinellas County, Sarasota County, Brevard County, and Flagler County. Of special importance is our proposal for a new study of coastal processes along all Florida's coastline. In regard to the Panama City Beach Nourishment Project, we wish to point out that the $400,000 proposed in the Administration's budget is entirely inadequate. At this pace, continuing planning and engineering would require at least five years and be in danger of being out of date by the time it is completed. Meanwhile, many miles of development there are at danger from coastal storms and tourism is threatened. We recommend doubling the amount proposed in the budget.

ENVIRONMENTAL RESTORATION AND ENHANCEMENT

One of our major goals is to broaden the scope of Federal participation in water resources development projects to include the restoration and enhancement of water resources. These environmental restoration and enhancement projects are particularly important to Florida. They provide the opportunity to correct previous destructive practices that threaten water and related resources in a state that depends directly on maintaining high environmental quality. We are still a very fast growing state and increasing demands are being placed on the very resources that bring many of the new residents and tourists to our state.

Governor Graham's plan to "Save the Everglades" is a major state commitment to preserve and restore one of the nation's most unusual and valuable ecosystems. We appreciate the cooperation we have received from the South Florida Water Management District, the Corps of Engineers and Congress on several components of the Governor's plan. Much more cooperation will be needed in a joint local-state-national program to preserve this unique ecosystem for all time. Altered water discharge schedules to Everglades National Park, land acquisition in the park's buffer areas, re-use of the N.E. Shark River Slough flow-way, and flood protection for East Everglades homeowners are all important aspects of this program.

Funds are requested for continuing the study of Biscayne Bay in Dade County. This study would evaluate the cumulative effects of previous Federal construction activities in and around the bay and suggest possible solutions to bay problems.

The Golden Gate Restoration Study would explore the feasibility of redistributing water over an area which has been overdrained by improper land development. This would restore marshlands, revitalize sport and commercial fisheries, and increase the area's depleted surface and groundwater supplies.

Funds for the continuation of the study of the Six Mile Cypress Strand, near Ft. Myers, will be used to examine means of restoring and preserving this area so that it can act as a natural buffer between the Ft. Myers area and a regional airport. This proposal has been developed with full support by local citizens, who have passed a referendum imposing new taxes upon themselves in order to assist this restoration effort.

A study of Habitat Restoration in Tampa Bay is proposed for initiation in FY 85. This would help greatly in the management of one of the nation's largest estuaries.

Though the Biscayne Bay, Golden Gate, and Six Mile Cypress Studies are authorized and previously funded, no funds were included for them in President Reagan's FY 85 budget. We urge you to correct these omissions.

CROSS FLORIDA BARGE CANAL

Also included in our program booklet is an appendix which contains a resolution by Florida's Governor and Cabinet recommending deauthorization of the Cross Florida Barge Canal and Federal participation in restoring a portion of the already constructed works.

CONCLUDING REMARKS

It is important to point out that the program which Florida is presenting today represents what we consider to be our basic needs. In order to be included in our final program, projects must undergo an extensive review process by interested State and local agencies within Florida. We would urge you to bear this in mind as you consider areas to reduce spending. We are very appreciative of funds appropriated in prior years. Should further clarification of the State's needs be necessary, please feel free to get in touch with us. Thank you.

STATE OF FLORIDA
FY 85 PUBLIC WORKS PROGRAM

Project	President's Budget	State of Florida Request
FLOOD DAMAGE PREVENTION (AND WATER SUPPLY)		
Construction		
1. Central and Southern Florida	$11,500,000 *	$11,500,000*
2. Four River Basins	2,000,000	2,000,000
3. Upper St. Johns	*	*
Studies		
4. Central and Southern Florida Water Supply	140,000	140,000
5. St. Marys River	—	300,000
6. Suwannee River	—	800,000
7. Tampa Bay Hurricane Vertical Evacuation	—	100,000
8. Withlacoochee River Regional Water Supply	—	150,000
NAVIGATION		
Construction		
9. Ft. Pierce Harbor	—	125,000
10. Gulf Coast Passes	—	250,000
11. Port Canaveral	—	11,500,000
12. Port Manatee	—	11,300,000
13. Tampa Harbor	13,000,000	13,000,000
Studies		
14. Clearwater Spoil Disposal	—	150,000
15. Escambia River Channel	—	150,000
16. Jupiter Inlet	—	100,000
17. Lower St. Johns River Enhancement	—	100,000
18. Mexico Beach Inlet	—	155,000
19. Miami Harbor	—	200,000
20. Miami River Cleanup	—	100,000
21. Port Canaveral	—	75,000
22. Port Sutton	123,000	123,000
BEACH EROSION CONTROL		
Construction		
23. Captiva Island	—	1,000,000
24. Dade County	1,400,000	1,400,000
25. Dade County Haulover Beach Park North	—	4,000,000
26. Delray Beach (Palm Beach County)	2,100,000	2,100,000
27. Duval County	3,900,000	3,900,000
28. Indian River County	—	171,000
29. Monroe County	—	168,000
30. Ocean Ridge-Briny Breezes (Palm Beach County)	—	2,657,000
31. Panama City Beaches	400,000	800,000
32. Pinellas County	400,000	400,000
33. Sarasota County	—	250,000
Studies		
34. Brevard County	—	150,000
35. Flagler County	—	115,000
36. Florida Statewide Beaches	—	1,080,000
ENVIRONMENTAL RESTORATION AND ENHANCEMENT		
37. Biscayne Bay	—	750,000
38. Golden Gate	—	402,000
39. Miami Bayfront Park	—	200,000
40. Six Mile Cypress	—	194,000
41. Tampa Bay Habitat Restoration	—	100,000
CODE 710 RECREATION PROJECT		
42. Virginia Key Park	—	100,000
	TOTAL REQUEST	$72,255,000

* Funding for the Upper St. Johns Project would be included in the appropriation for the overall Central and Southern Florida Project.

Letter From Victoria J. Tschinkel

March 29, 1984

Honorable Mark O. Hatfield, Chairman
Committee on Appropriations
United States Senate
1322 Dirksen Building
Washington, D.C. 20515

Dear Senator Hatfield:

I am writing to express the State of Florida's support for an item in President Reagan's proposed FY 1985 budget, for $250,000 in "Section 308" funding for the Mobile District of the U.S. Army Corps of Engineers. These funds would be used to continue studies on the Apalachicola-Chattahoochee-Flint (A-C-F) River System that were initiated last year by the Corps, and the States of Florida, Georgia, and Alabama to develop a long-range water budget and water management strategy for A-C-F System.

In June, 1983, the District Engineer of the Corps Mobile District and the Governors of Florida, Georgia, and Alabama entered into a Memorandum of Agreement to carry out several studies over the next few years to lay the foundation for developing a responsible water management system for the A-C-F System that will recognize the water needs of all users. The Corps and the three states have been working together since then to conduct preliminary research to develop a plan of study for generating the long-range water budget and water management strategy. We hope to prepare the budget and strategy along with a navigation maintenance plan and a drought management plan for the system over the next few years.

We would appreciate your support of this important study.

Sincerely,

Victoria J. Tschinkel
Secretary

Central and Southern Florida Flood Control Project: Construction

Estimated Federal Cost	$758,000,000
Estimated Non-Federal Cost	400,000,000
Federal Funds Through FY 84	280,156,000
President's Budget FY 85	11,500,000
Corps Probable Capabilities FY 85	11,500,000
State of Florida Request FY 85	11,500,000

Benefit Cost Ratio: 4.9:1.0

Project Sponsor: South Florida Water Management District

Project Description:

The Central and Southern Florida Flood Control Project is a regional system of water control works first authorized by Congress in 1947. The project area encompasses approximately 17,930 square miles and includes the Kissimmee River Basin, Lake Okeechobee and its regulatory outlets, a large portion of the Everglades, and the lower east coast of Florida. Included in the project are a series of levees, canals, water conservation areas, control structures and similar works designed to provide optimum conservation, management, and use of the water resources in the region.

The project's local sponsor, the South Florida Water Management District, is now requesting the following project components for FY 85: protecting the Herbert Hoover Dike around Lake Okeechobee by revetment construction; further planning for C-131 (St. Lucie County Irrigation Water Supply); and additional work on S-319 (a structure associated with the West Palm Beach Canal).

Project Justification:

In the first half of this century, heavy seasonal rains combined on several occasions with the passage of hurricanes to cause extensive long-lasting flooding. This project and the Water Management District are the result of Federal and State responses to the severe flooding of 1947. South Florida also experiences periodic severe droughts, and the project was expanded in 1968 to include increased storage and conservation of water and improved distribution of water throughout the project area. This expansion has acquired greater importance as a result of floods in 1982 and extreme droughts in 1971 and 1981.

The population of South Florida continues to grow dramatically, and the potential benefits of both flood control and water conservation in the project area are increasing accordingly. The project is capable of providing the water management so badly needed by South·Florida.

Four River Basins Project: Construction

Estimated Federal Cost	$203,000,000
Estimated Non-Federal Cost	128,000,000
Federal Funds Through FY 84	71,071,000
President's Budget FY 85	2,000,000
Corps Probable Capabilities FY 85	2,000,000
State of Florida Request FY 85	2,000,000

Benefit Cost Ratio: 1.8:1.0

Project Sponsor: Southwest Florida Water Management District

Project Description:

The Four River Basins Project area covers 6,000 square miles in 14 counties of central and southwest Florida. The project is providing substantial flood protection for an area experiencing tremendous population growth. It includes part of the drainage basins of four major streams - the Hillsborough, Oklawaha, Withlacoochee, and Peace Rivers - and three smaller west coast watersheds - Pithlachascotee River, Anclote River, and Lake Tarpon. The authorized plan includes numerous works in several parts of the project area. Since 1961, major components of the Four River Basins Project have been completed, including the Tampa Bypass Canal.

The local sponsor is requesting funds in FY 85 for work on three separate components of the project:

(1) continuing construction on the lower Hillsborough Wilderness Park, specifically the Flatwoods Site and the Tis-a-wee Site;

(2) continuing work on the removal of shoaling on the lower portions of the Tampa Bypass Canal; and

(3) initiating construction of the Flint Creek Mitigation Project.

Project Justification:

The further development of the Lower Hillsborough Wilderness Park will allow greater use of the major land resources acquired as part of the Four River Basin Project. The work proposed for the Tampa Bypass Canal will help to prevent a recurrence of the devastating floods that affected Tampa 20 years ago. Work on the Flint Creek Mitigation Project will prevent property owners in the Lake Thonotosassa area from suffering from floods caused by the operation of the Lower Hillsborough Flood Detention Area.

Upper St. Johns Project: Construction

Estimated Federal Cost Estimated Non-Federal Cost Federal Funds Through FY 84 President's Budget FY 85 Corps Probable Capabilities FY 85 State of Florida Request FY 85	Cost figures for this project are included in those for the Central and Southern Florida Flood Control Project

Project Sponsor: St. Johns River Water Management District

Project Description:

The project area of the Upper St. Johns River Basin in east-central Florida encompasses about 2,000 square miles and consists of some 60 individual contributing subbasins. The Corps of Engineers, in cooperation with the St. Johns River Water Management District, is currently in the process of revising the general design components of the Upper St. Johns River Project. In 1974, the original plan was deemed unacceptable to the State, primarily for environmental reasons.

The Water Management District entered into an agreement with the Corps in 1976 to replan the project. The first step in the new process was to appoint a Technical Advisory Committee composed of regulated interests, environmental interests, and a representative from local, State, and Federal government.

The Committee attempted to formulate a plan or alternative which would accommodate flood control, water supply, and elevated minimum flows. Water quality and quantity problems in the project area have been caused by interbasin transfers of water, historical loss of nearly 300,000 floodplain acres to agricultural uses, and overdrainage. The Committee formulated a conceptual plan which was presented to the Water Management District in September, 1980, accepted, and then passed on to the Corps for a review to assess the project for inclusion in the Public Works Program. Modifications to L-73, a levee constructed between 1967 and 1972, appear necessary, no matter which alternative plans are accepted.

Project Justification:

This project could begin reversing decades of environmental damage in the Upper St. Johns River Basin. The multifaceted nature of the project is especially promising. Potentially, the project could offer flood control, water supply, elevated minimum flows, and marsh reestablishment with associated water quality benefits.

Central and Southern Florida Water Supply

Estimated Federal Cost	$2,332,000
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	2,192,000
President's Budget FY 85	140,000
Corps Probable Capabilities FY 85	140,000
State of Florida Request FY 85	140,000

Project Sponsor: South Florida Water Management District

Project Description:

The ultimate purpose of this study is to develop alternative sources of water supply for use in south central Florida in order to augment the supply presently being furnished by the Central and Southern Florida Flood Control Project. The requested FY 85 funding would allow completion of the study. Some of this funding would be for a study of a specific augmentation program involving deep aquifer storage and retrieval of stormwater runoff.

Project Justification:

Research and planning concerning the concept of deep aquifer storage and retrieval have reached the point where large scale experimentation is required. The results of studies to date, which indicate the potential for recovering significant quantities of water and potentially high efficiencies in comparison to other alternatives being investigated, are sufficiently encouraging to justify engineering cost and feasibility studies as proposed under this project.

The extreme drought in 1981 brought into sharp focus the importance of this project. Population growth projections are consistent in forecasting continued increases. This will place an unacceptable stress on water supply systems in South Florida unless alternate sources of potable water are developed.

St. Marys River Basin Floodplain Study

Estimated Federal Cost	$2,000,000
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	250,000
President's Budget FY 85	0
Corps Probable Capabilities FY 85	300,000
State of Florida Request FY 85	300,000

Project Sponsor: St. Johns River Water Management District

Project Description:

The St. Johns River Water Management District is sponsoring this ongoing study to provide information for proper floodplain management in the St. Marys River Basin. The St. Marys River forms, for most of its length, the northeastern boundary of Florida and drains about 1500 square miles. About 540 square miles of the basin are in Georgia. FY 85 funding is needed to continue the study.

The District hopes to obtain a wide variety of useful information from the study including compilation of existing data, identification of all subbasin boundaries, topographic mapping of the 100-year floodplain, mapping of existing land use, and the creation of a watershed management model.

The Water Management District hopes that the effort will improve interagency and interstate coordination for management of the St. Marys. Ultimately, formal or informal interstate agreements for management of the St. Marys may be devised.

Project Justification:

This study will significantly improve water resource planning and management in the St. Marys River Basin. The basin will benefit from the first water resources baseline study ever undertaken in it and future problems may be prevented. The hydrology of the river system will be better understood and management of the basin will be improved. Flood damage costs will be reduced and human lives saved from disruption. Also, environmental changes such as structural modifications in the drainage system may be minimized by using the information gained in the study.

Suwannee River Study

Estimated Federal Cost	$1,650,000
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	570,000
President's Budget FY 85	0
Corps Probable Capabilities FY 85	800,000
State of Florida Request FY 85	800,000

Project Sponsor: Suwannee River Water Management District

Project Description:

This is an ongoing study of the Suwannee River Basin in north-central Florida. The study is developing specific nonstructural programs for minimizing flood damages, and will also develop programs to protect recharge areas, to protect surface water and groundwater supplies, and to enhance environmental quality. The study will also evaluate scenic quality, recreation, and small boat navigation for the Suwannee and its tributaries.

Recent related State actions include the redesignation of the upper Suwannee as an Outstanding Florida Water and the work of the Suwannee River Resource Planning and Management Committee. The Committee was appointed by Governor Graham and soon developed 57 specific recommendations to address problems in the Suwannee Basin. The Committee then developed a model floodplain ordinance that now has been adopted by all of the Florida counties along the river.

Project Justification:

Three floods of 100-year magnitude have occurred on the Suwannee over the past 35 years. The 100-year flood level has been exceeded on about 50% of the river floodplain at least once since 1947, with flooding most frequent from February through April. All parties now agree that identification, protection, and management of this river and its associated resources is essential. This study will contribute subtantially to those goals. The study is providing information needed to adequately protect the river and its floodplain resources.

Tampa Bay Region Hurricane Vertical Evacuation Planning Study

Estimated Federal Cost	$500,000
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	0
President's Budget FY 85	0
Corps Probable Capabilities FY 85	100,000
State of Florida Request FY 85	100,000

Project Sponsor: Tampa Bay Regional Planning Council

Project Description:

The Tampa Bay region, on the Central Gulf Coast of Florida, is highly urbanized with two large cities, St. Petersburg and Tampa, located on opposite sides of Tampa Bay. Under present conditions, hurricane warnings cannot be given in sufficient time to completely evacuate vulnerable residential areas. A possible means to alleviate this problem is to move some residents into higher floors of certain buildings. This would help prevent "traffic jams" on roads leading to safe inland areas. The Tampa Bay Regional Planning Council has therefore proposed a study of vertical evacuation in the Tampa area. Congressional authorization for this study has now been obtained, and the requested FY 85 funding is for the first phase of the study.

Project Justification:

Vertical evacuation might shorten the total time needed for evacuation. The National Hurricane Center currently strives to provide 12 hours of warning that a hurricane is expected to strike a particular area. However, the Tampa Bay area requires 12 to 18 hours to successfully evacuate all residents living in vulnerable areas. The additional time that might be gained from a vertical evacuation scheme could, therefore, be critical. Vertical evacuation, if proven successful, could be applied to other areas where sturdy high rise structures are available.

Withlacoochee River Regional Water Supply Study

Estimated Federal Cost	$550,000
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	350,000
President's Budget FY 85	0
Corps Probable Capabilities FY 85	150,000
State of Florida Request FY 85	150,000

Project Sponsor: Withlacoochee River Regional Water Supply Authority

Project Description:

The Withlacoochee River Regional Water Supply Authority is proposing "Phase II" of the water supply study previously carried out by the Corps of Engineers. The authority proposes that the initial survey of water supply problems and solutions be carried to a finer level of detail and design.

Citrus and Hernando Counties, located within the study area, were the two fastest growing counties in Florida over the past decade. Citrus County is one of the fastest growing counties in the nation. The Withlacoochee area was the only region in Florida to exceed a 100% growth rate in the 1970's. This rapid growth, which is projected to continue, relates directly to the need to ensure a consistently high quality source of water supply in the Withlacoochee area.

Project Justification:

This project would bring together the ongoing objectives of the Withlacoochee River Regional Water Supply Authority and the previously-completed Four River

Basins Water Resources Management Study carried out by the Corps. Although the Corps' study assembled a regional data base and made estimates of water needs and demands, an examination of the impacts and problems associated with the potential water supply alternatives for the area is still needed. This phase of the study would permit advanced planning, designing, and feasibility testing of water supply alternatives. If a detailed master plan is completed prior to the construction of water distribution facilities, then the most feasibile sources of water supply to conserve water resources can be determined.

NAVIGATION

Fort Pierce Harbor Project: Construction
(Continuing Planning and Engineering)

Estimated Federal Cost	$125,000
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	0
President's Budget FY 85	0
Corps Probable Capabilities FY 85	125,000
State of Florida Request FY 85	125,000
Benefit Cost Ratio: 2.6:1	

Project Sponsor: Fort Pierce Port and Airport Authority

Project Description:

Fort Pierce is in St. Lucie County on the east central Florida Coast. The Corps of Engineers is now in the final steps of a study to determine the feasibility of deepening the Fort Pierce access channel and harbor area. The existing channel is 3.5 miles long and 25 feet deep extending from the Atlantic Ocean through Fort Pierce Inlet across the Indian River and the Intracoastal Waterway and terminating at Fort Pierce with a turning basin in front of the city docks. The main commodities shipped through Ft. Pierce are fresh citrus products (exported) and aragonite (imported).

The Corps has recommended that the existing project be modified to provide a channel 36 feet deep and 500 feet wide extending from the open ocean to within the existing jetties, then becoming 32 feet deep and 300 feet wide from that point to the existing turning basin area. The project would also include expansion of the turning basin to 1,100 feet by 500 feet and 32 feet deep immediately north of the existing terminal area.

Project Justification:

The project would allow Fort Pierce Harbor to accomodate deeper draft ships which would result in transportation savings to shippers. This should result in an increase in shipping through the port which could in turn attract new businesses and increase employment in the area. Since unemployment in the Fort Pierce area exceeded 20 percent in early 1983, this latter benefit is especially important.

The project also provides recreational benefits and possible environmental benefits. Beach renourishment associated with the project would enhance beach recreation in the area, and the conversion of 16 acres of deep water to a shallow water seagrass community should enhance fisheries. Finally, increased tidal flushing (resulting from a deeper and wider channel) might improve the area's water quality.

Gulf Coast Passes Navigation Improvement: Construction (Continuing Planning and Engineering)

Estimated Federal Cost	$250,000
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	0
President's Budget FY 85	0
Corps Probable Capabilities FY 85	250,000
State of Florida Request FY 85	250,000

Project Sponsor: West Coast Inland Navigation District

Project Description:

This is an ongoing study of the feasibility of incorporating seven passes on the central Gulf Coast of Florida into the existing Intracoastal Waterway. The study began in 1978 and is sponsored by the West Coast Inland Navigation District. FY 85 funding will be needed to complete preconstruction planning for the project.

The passes in question are Stump Pass, Longboat Pass, Big Sarasota Pass, Dunedin Pass, Hurricane Pass, and Midnight Pass. The study is determining the practicality of maintaining these passes at 9 feet Mean Low Water to allow small pleasure and commercial boats access to and from the Gulf of Mexico. Dredging these passes might also provide a source of beach nourishment material for eroded beaches in the area.

Project Justification:

Incorporating the passes into the Intracoastal Waterway should result in a greater consistency of navigation aids (buoys, signs, charts, etc.) that would be of great assistance to boaters, particularly those from out of state or otherwise unfamiliar with local waters.

Many of the beaches in this area are eroding. Thus, beach nourishment could be a valuable by-product of this project.

Port Canaveral: Construction

Estimated Federal Cost	$22,700,000
Estimated Non-Federal Cost	5,967,000
Federal Funds Through FY 84	7,162,000
President's Budget FY 85	0
Corps Probable Capabilities FY 85	11,500,000
State of Florida Request FY 85	11,500,000
Benefit Cost Ratio: 3.1:1.0	

Project Sponsor: Canaveral Port Authority

Project Description:

The Canaveral Port Authority is requesting FY 85 funding for dredging of a channel and turning basin to 31 feet. Port Canaveral is located on the east central Coast of Florida approximately 150 miles south of Jacksonville.

Project Justification:

Port Canaveral has become an important energy port, providing facilities for low cost ocean transportation of bunker fuel for the area's electric power plants and for the import and export of bulk commodities such as cement, newsprint, salt, citrus concentrate, frozen fish, and scrap metal. The port's business is growing along with the unprecedented growth of the Central Florida region. As of now, all piers at the port are fully used or committed to projects under development, and there is no room for expansion for deep draft ship operations.

Completion of the western turning basin as soon as possible is particularly important. Unstable sediment conditions there are making harbor depth maintenance more difficult and costly. Project completion would significantly reduce maintenance dredging, since bulkheading (which would be funded by the port authority) could be finished and depth would be generally equalized. This would reduce the environmental impacts on the harbor area and the need for large spoil areas.

The port authority is now cooperating with Disney World to promote Port Canaveral as a home port for cruise ships. Cruise ship calls at Port Canaveral increased from eight to fifteen in one year and more berthing capacity is need to accommodate the additional expected increases. The completed project would allow construction of this capacity.

Economically, the port is a stabilizing influence helping to offset the cyclical nature of the space and missile industries which tend to dominate the local area. Also, the port is a military as well as a commercial facility and the overflow of military shipping is frequently docked at the port's commercial berths. The rapidly increasing commercial use of the port is reducing the port's ability to meet the military and commercial demand for berths.

Port Manatee: Construction

Estimated Federal Cost	$11,300,000
Estimated Non-Federal Cost	7,500,000
Federal Funds Through FY 84	305,000
President's Budget FY 85	0
Corps Probable Capabilities FY 85	11,300,000
State of Florida Request FY 85	11,300,000
Benefit Cost Ratio: 19.7:1.0	

Project Sponsor: Manatee County Port Authority

Project Description:

The Port Manatee Project is a proposal for Federal assumption of maintenance dredging of the existing navigation channel constructed by the Manatee County Port Authority in 1969-71. The proposed plan involves both removal of materials deposited in the channel since its construction and new construction at both ends to improve safety of navigation. The channel dimensions would be 40 feet deep at Mean Low Water (the same as originally constructed by the port authority) plus two feet allowable overdredge. Total channel length would be 3.0 miles, extending from the port facilities to the main Tampa Harbor Channel. The northwest end of the Manatee Harbor Channel would intersect the main Tampa Harbor Channel in an expanded "widener". The west side of the channel would be enlarged in a circular path with a radius of 3,000 feet beginning 2,700 feet from the intersection. The east side of the channel would be changed to a 45 degree transition beginning 1,000 feet from the intersection. The second part of the new work in the proposal is at the port end of the channel. The existing turning basin there would be expanded about 6.6 acres.

The project includes an attempt to mitigate for environmental damage done by dredging. Ten acres of an existing above-water spoil island would be lowered to -2 feet Mean Low Water to compensate for the destruction of 6.6 acres of vegetated shallow bay bottom caused by the enlargement of the turning basin. Vegetation planting is not planned, but the Corps of Engineers believes that the lowered area will revegetate itself naturally.

Project Justification:

Port Manatee now serves the local area both for oil imports and for phosphate exports. The requested construction would allow more economical transportation to and from the port and would improve safety of navigation.

Tampa Harbor Deepening: Construction

Estimated Federal Cost	$176,000,000
Estimated Non-Federal Cost	4,884,000
Federal Funds Through FY 84	151,577,000
President's Budget FY 85	13,000,000
Corps Probable Capabilities FY 85	13,000,000
State of Florida Request FY 85	13,000,300
Benefit Cost Ratio: 2.1:1	

Project Sponsor: Tampa Port Authority

Project Description:

The Tampa Port Authority is requesting FY 85 funding for the ninth and final year of their harbor deepening project. The funds would permit work on central segments of their 67 miles of authorized channels.

In 1982, dredging was suspended by court order as a result of a lawsuit by Manatee County opposing the choice of spoil disposal sites made by the Corps of Engineers. EPA and the Corps are now attempting to select a site with acceptable environmental characteristics. Congress included an additional $1,500,000 in the FY 84 budget for spoil disposal expenses.

Project Justification:

Project benefits accrue from the lower costs of transporting goods in more economical, deeper draft vessels. For Tampa Harbor, approximately eighty percent of this benefit will be attributed to cheaper shipments of phosphate ore products. Tampa Harbor is the nation's eighth largest port in terms of tonnage.

Clearwater Spoil Disposal Study

Estimated Federal Cost	$400,000
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	0
President's Budget FY 85	0
Corps Probable Capabilities FY 85	150,000
State of Florida Request FY 85	150,000

Project Sponsor: City of Clearwater

Project Description:

The Clearwater Spoil Disposal Study would evaluate spoil disposal alternatives for necessary maintenance dredging of navigation channels in Clearwater Bay. Clearwater is in Pinellas County on the west-central coast of Florida.

Population in the area is increasing dramatically and this will increase the need for maintenance dredging. Existing and possible future dredging projects include:

(1) maintenance of the Intracoastal Waterway;

(2) access to Dunedin Pass and the Sand Key Coast Guard Station;

(3) maintenance of marina facilities; and

(4) restoration of residential finger canal water quality and navigation.

Based on current knowledge, such projects will not produce beach quality material. Any study to be authorized should investigate the physical and chemical make up of these sediments and determine the best method of disposal. FY 85 funding would be used to initiate the study.

Project Justification:

The need for regular maintenance dredging in Clearwater Bay is increasing. There is considerable disagreement over the quality of the proposed dredge material. Undoubtedly, some of it is not suitable for open water disposal, but some of it might be suitable for beach restoration. All the proposed sites for dredging need to be inventoried and the sediments classified according to their physical and chemical properties. Such an inventory would facilitate decisions as to proper disposal of dredged material. With the expected population growth in this already highly populated area, a search for environmentally sound solutions to Clearwater's maintenance dredging problem is badly needed.

Escambia River Channel Study

Estimated Federal Cost	$460,000
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	110,000
President's Budget FY 85	0
Corps Probable Capabilities FY 85	150,000
State of Florida Request FY 85	150,000

Project Sponsor: Escambia County

Project Description:

This study is evaluating the feasibility of deepening the Escambia River Navigation Channel so that it can more safely accomodate barge traffic. The project site is at the mouth of the river as it enters Escambia Bay near Pensacola. FY 85 funding is needed to continue the study.

The navigation channel is now heavily used for barge transportation to and from Monsanto Textiles Company and Gulf Power's Crist Steam Plant. Approximately 140 barges use the channel each month. The channel extends upstream from the river mouth approximately seven miles and varies in width from 100-175 feet. At the present time, the channel is maintained at an authorized depth of ten feet. This is adequate immediately following dredging, but siltation and shoaling quickly reduce the depth and impede barge traffic. The most recent maintenance dredging was finished about three years ago, but the channel has already filled in enough to make barge movement difficult.

Project Justification:

The Gulf Power Crist Steam Plant is a major employer in the Pensacola area, and it supplies electrical power to thousands of customers. The Monsanto Textiles Company is the largest non-governmental employer in Escambia County. Thus, unhindered barge traffic to these companies is essential to the area's economic health. This study would determine the project alternative most likely to allow safe, economical barge traffic on the river.

Jupiter Inlet Study

Estimated Federal Cost	$300,000
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	0
President's Budget FY 85	0
Corps Probable Capabilities FY 85	100,000
State of Florida Request FY 85	100,000

Project Sponsor: Jupiter Inlet District

Project Description:

This study would evaluate the feasibility of providing a Federal navigation project at Jupiter Inlet to permit small boat navigation from the Loxahatchee River to the Atlantic Ocean. Jupiter Inlet is located in northern Palm Beach County on the southeast coast of Florida. It is about 16 miles south of St. Lucie Inlet and 14 miles north of Lake Worth Inlet. The inlet is a natural waterway but is not a maintained navigation inlet. Its use is currently limited only to boaters with knowledge of local conditions. Principal difficulties at the inlet result from inadequate depths across the ocean bar at its entrance. During periods of low tides or high seas or swells, passage over the ocean bar is extremely hazardous, if not impossible. In the past 20 years, approximately ten people have been killed in boating accidents at the inlet. FY 85 funding would be used to initiate the study.

Project Justification:

The project would directly benefit the commercial fishermen and pleasure boaters in the area by decreasing the danger and possible loss of life and property associated with the inlet. It would also benefit the marine oriented business of the area and increase tourism.

Lower St. Johns River Enhancement Study

Estimated Federal Cost	$500,000
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	0
President's Budget FY 85	0
Corps Probable Capabilities FY 85	100,000
State of Florida Request FY 85	100,000

Project Sponsor: Duval County, City of Jacksonville

Project Description:

This proposed study is designed to assess the lower St. Johns River from the Atlantic Ocean to the vicinity of the Port of Jacksonville for possible improvements to navigation, spoil disposal and erosion problems and recreation. The Jacksonville Harbor Channel is a Federally constructed and maintained project. Historically, the St. Johns River from the port to the ocean has had a number of problems. These include erosion of the shoreline due to shipping and boating activities in the main channel, navigational deficiencies and derelict vessels which impede navigation, spoil disposal, inadequate flood protection, environmental degradation, and a lack of recreational facilities to serve fishermen, picnickers, tourists, etc. This would be a generalized study designed to identify the problems caused by years of neglect and to determine methods to restore and enhance the shoreline and environment in general. FY 85 funding would be used to begin the study.

Project Justification:

This study would result in recommendations to decrease erosion by stabilizing the shorelne and dune areas, increase flood protection, improve navigation and navigational aids, improve the conditions of the spoil sites produced by maintenance dredging, reduce non-point sources of contamination, restore destroyed salt water marsh areas, and improve recreational facilities. These improvements would result in economic benefits by attracting tourists and residents to the improved boating and recreational facilities and by permitting port development on the stabilized shoreline areas.

Mexico Beach Inlet Study

Estimated Federal Cost	$265,000
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	110,000
President's Budget FY 85	0
Corps Probable Capabilities FY 85	155,000
State of Florida Request FY 85	155,000

Project Sponsor: Town of Mexico Beach

Project Description:

This is an ongoing feasibility study evaluating alternatives for modifying the entrance to a canal so that navigation into and from the canal will be enhanced. The study is also evaluating the possible use of spoil taken from the canal to renourish adjacent beaches.

Mexico Beach is located on the coast of Bay County approximately 20 miles southeast of Panama City. The canal provides access to the open waters of the Gulf of Mexico for boats launched at the three marinas located along the sheltered stretches of the canal. Boating traffic into and from the canal is reduced, and at times eliminated, by shoaling.

The Corps of Engineers' Draft Reconnaissance Report for the study was released in early 1983 and indicated that several project alternatives were economically feasible and environmentally acceptable. All alternatives would provide a 6-foot-deep inner channel and an 8-foot-deep outer channel. The best alternative will be determined during the remainder of the study.

Project Justification:

The economy of the Mexico Beach area is nearly totally tourist-dependent, and tourists come to Mexico Beach for basically two activities - fishing (mostly from boats) in the Gulf of Mexico and beach related recreation. Fishermen (and other boaters) using the three marinas located along the canal generate a significant portion of Mexico Beach's revenues. When the canal inlet is closed, most of this boating revenue is lost. In addition, many boaters who would otherwise visit Mexico Beach go elsewhere due to the uncertainty of passage to and from the inlet.

A channel maintenance project at Mexico Beach could have other important benefits. Redesign of the jetty at the mouth of the canal could reduce or eliminate the jetty's contributions to erosion of adjacent beaches. In addition, suitable spoil material from the canal could be used to renourish these beaches. Finally, safe refuge could be provided for boats during storm conditions. Currently, no safe harbor exists between Port St. Joe and Panama City, a distance of approximately thirty miles.

Miami Harbor Channel Study

Estimated Federal Cost	$750,000
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	337,000
President's Budget FY 85	0
Corps Probable Capabilities FY 85	200,000
State of Florida Request FY 85	200,000

Project Sponsor: Dade County

Project Description:

This is an ongoing study of the navigation problems associated with the present configuration of Miami Harbor. The specific problems being addressed are the possible hazards presented by a 60° turn in the offshore access channel, the constriction of the main ship channel in Government Cut from 500 feet to 400 feet, and the existing 1600-foot diameter turning basin. The Corps of Engineers recently recommended that this study be extended since container ship traffic into and from Miami is now projected to expand explosively over the next two decades.

The bend in the access channel may present a safety and navigation problem which could be increasing as larger ships use Miami Harbor more frequently. Due to the bend, the channel can only be used for one-way traffic, and several groundings of large vessels have occurred over the past few years. The constriction of the ship channel inside Government Cut causes a navigational hazard compounded by strong tides and currents. The main turning basin presents problems to ships over 1,000 feet long in positioning and in dealing with tides, currents and winds while turning. The Government Cut jetty system may also require modification to reduce rip tides in the main channel.

Project Justification:

Potential project benefits include a reduction in delays in navigating the access channel, a reduction of the need for tug services in the access channel and turning basin, and an increase in the safety of the harbor, particularly for larger ships. The project is strongly supported by the Biscayne Bay Pilots Association.

Miami River Cleanup: Study

Estimated Federal Cost	To be determined
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	0
President's Budget FY 85	0
Corps Probable Capabilities FY 85	0
State of Florida Request FY 85	$100,000

Study Sponsor: Dade County

Project Description:

This proposal is for funding to complete this study. The study area is the six miles of the Miami River in Dade County from its mouth past 36th street where it joins the Miami Canal, as well as the 14 miles of the Canal within Dade County. The study is investigating the feasibility of dredging the Miami River to improve water quality.

The river is a Federal navigation project with authorized channel depths of fifteen feet. Development over many years has caused serious water quality problems in the river and it may be advisable to remove the contaminated sediments in the channel. Studies already completed by the Corps confirm that the sediments are heavily-polluted. However, in the late 1970s, the Corps suspended the completion of the study, pending action by the local sponsor to reduce the continuing pollutant loading to the river. Dade County has made progress in this area. Another related event is the Governor's appointment of a Miami River Management Committee to devise means of improving all the assets of this urban waterway. Water quality improvement is an objective of the committee.

Project Justification:

The Miami River is an underused urban resource. The Miami River Management Committee and Dade County are striving to improve its value for navigation, recreation, tourism and as an aesthetic amenity. The polluted sediments in the navigation channel are degrading water quality and preventing full use of a major urban river. Completion of the study can point the way to solving these water quality problems.

Port Canaveral: Study

Estimated Federal Cost	$262,000
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	0
President's Budget FY 85	0
Corps Probable Capabilities FY 85	75,000
State of Florida Request FY 85	75,000

Project Sponsor: Canaveral Port Authority

Project Description:

The Canaveral Port Authority is requesting a feasibility study of dredging Canaveral Harbor Channel and other areas of Port Canaveral to sufficient depths to allow for economical coal importation. The study would also evaluate a possible expansion of Federal maintenance dredging at the port. FY 85 funding would be used to begin the study.

Port Canaveral is located on the east central coast of Florida approximately 150 miles south of Jacksonville. This proposed study springs from a lease agreement executed in 1980 between a shipping company and the port authority. The shipping company is planning to locate a coal offloading, storage, and transportation facility at Port Canaveral. The deep draft nature of the coal carrying vessels would require a channel depth of at least 41 feet. Thus, the port authority is requesting a feasibility study of deepening several turning basins and channels to 41-45 feet and of other basins and channels to at least 35 feet.

Project Justification:

A coal offloading, storage, and transportation facility at Port Canaveral could be used to provide coal economically for power plants in central and eastern Florida. The coal would replace petroleum and this substitution is consistent with Federal policy aimed toward restricting petroleum imports. The most economical coal carrying vessels require a channel depth of 41-45 feet, and Port Canaveral currently is not deep enough to accomodate such vessels fully loaded.

Maintenance dredging of the various channels and turning basins at Port Canaveral is currently done by the port authority, the Corps of Engineers, and the Navy. This multiple maintenance situation is confusing, cumbersome, and inefficient. Many contracting conflicts have resulted and have made dredging more expensive and time consuming than it would have been if done under a single contract. Federal assumption of this maintenance dredging would alleviate these problems.

Port Sutton Channel: Study

Estimated Federal Cost	$293,000
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	170,000
President's Budget FY 85	123,000
Corps Probable Capabilities FY 85	123,000
State of Florida Request FY 85	123,000

Project Sponsor: Tampa Port Authority

Project Description:

The Tampa Port Authority has proposed a study of the desirability of deepening Port Sutton Channel from 30 feet to 43 feet. The project is presently authorized for Federal assumption of maintenance dredging after the local sponsor accomplishes the deepening. This study, authorized by Congress in 1981, would determine whether the deepening itself should also be a Federal responsibility. FY 85 funding will be needed to complete the study.

Port Sutton Channel is a man-made side channel from the main Tampa Harbor Channel. It is presently 200 feet wide by 30 feet deep. The associated land facilities are privately owned and occupied by various concerns. Terminals handle large quantities of such commodities as phosphate, sulphur, petroleum, cement and potash.

Project Justification:

Port Sutton Channel, with the completion of the deepening of the main harbor channel, will be much shallower than the access channel to it. Shipment of commodities to Port Sutton terminals will be seriously constrained by water depths directly in front of their final destination. Making depths at Port Sutton consistent with Tampa Harbor depths will permit cargoes to be shipped in the most economical deep-draft vessels.

BEACH EROSION CONTROL

Captiva Island Beach Nourishment: Construction

Estimated Federal Cost	$1,000,000
Estimated Non-Federal Cost	4,000,000
Federal Funds Through FY 84	0
President's Budget FY 85	0
Corps Probable Capabilities FY 85	1,000,000
State of Florida Request FY 85	1,000,000

Project Sponsor: Captiva Erosion Prevention District

Project Description:

Captiva Island is on Florida's southwest coast near Fort Myers. This is a request for beach restoration for 3.0 miles of beach on Captiva Island. The restored beach would be approximately 100 feet wide and would be constructed in accordance with the overall Federal Beach Erosion Control Study for Lee County completed by the Corps of Engineers in 1969.

Project Justification:

In 1969, at the request of the Lee County Commission, the Corps prepared a study on beach erosion for Lee County. The study reported that the beaches were severely eroded and recommended a Federal project of beach nourishment for erosion control. Historical records show over 700 feet of shoreline recession since 1906, and a peak year of more than 39 feet. Erosion rates measured from 1967 to 1979 are three to four cubic yards per linear foot of beach per year. This project, by renourishing the beach area, would provide protection to upland property, provide hurricane and storm protection for portions of a road which is the only land access and emergency evacuation route, and provide additional public recreation area.

Dade County Beach Erosion Control and Hurricane Protection Project: Construction

Estimated Federal Cost	$44,300,000
Estimated Non-Federal Cost	37,480,000
Federal Funds Through FY 84	32,944,000
President's Budget FY 85	1,400,000
Corps Probable Capabilities FY 85	1,400,000
State of Florida Request FY 85	1,400,000
Benefit Cost Ratio: 4.5:1.0	

Project Sponsor: Dade County

Project Description:

This project is intended to provide renourishment, as needed, for Dade County's recently completed Beach Erosion Control and Hurricane Protection Project. The overall project involved the dredging and emplacement of 14 million cubic yards of material to form a protective and recreational beach and protective dune for 9.3 miles of shoreline between Government Cut on the south and Bakers Haulover on the north. This shoreline is adjacent to Miami Beach, Surfside, and Bal Harbour Village. The renourishment material is being obtained from off-shore areas by dredging.

Project Justification:

The project is providing beach erosion control and hurricane surge protection for beaches of great economic importance. Dade County's beaches provide badly needed recreational opportunities for the densely populated coastal sections of Dade County. In addition, the beaches are extremely important tourist attractions, and the economy of the area would suffer significantly if the beaches were not preserved.

Dade County Beaches - Haulover Beach Park North: Construction

Estimated Federal Cost	$4,000,000
Estimated Non-Federal Cost	4,000,000
Federal Funds Through FY 84	218,500
President's Budget FY 85	0
Corps Probable Capabilities FY 85	4,000,000
State of Florida Request FY 85	4,000,000
Benefit Cost Ratio: 2.8:1	

Project Sponsor: Dade County

Project Description:

This project would provide control of beach erosion and hurricane-induced flooding for the coastal area of Dade County north of Haulover Beach Park. The project would also provide a recreational beach. Sand would be obtained from off-shore areas by dredging.

Project Justification:

Beach erosion in the project area results from a combination of factors including prevailing winds, swells, storms, beach development, protective structures, and the presence of artificial inlets. Recreational beach has been lost, beach front property is threatened with erosion, and seawalls have come under direct waves. Many of the problems now associated with the subject shoreline are the result of shoreline alterations made without knowledge of the sediment transport mechanism in the area or without regard for the protective value and sediment supply of the beach dune system. A general deficiency in supply of littoral material reaching the area plus the action of littoral barriers have resulted in severe erosion over parts of the project area.

Delray Beach Maintenance Nourishment Project: Construction
(Palm Beach County)

Estimated Federal Cost	$2,100,000
Estimated Non-Federal Cost	2,425,000
Federal Funds Through FY 84	0
President's Budget FY 85	2,100,000
Corps Probable Capabilities FY 85	2,100,000
State of Florida Request FY 85	2,100,000

Project Sponsor: City of Delray Beach

Project Description:

This project is part of the continuing restoration program for the Palm Beach County beaches. Delray Beach has experienced a severe erosion problem for many years and various structural methods have been tried in an attempt to reduce the problem and protect upland properties. However, these efforts have not been successful. The beach was nourished in 1973, and a maintenance nourishment project was done in 1978. This new project would replenish sand lost since the 1978 nourishment. FY 85 funding would be used to construct the project.

Project Justification:

The project is consistent with the overall nourishment plan for the Palm Beach County beaches. The renourished beach will protect upland structures from erosion and undermining and will provide enhanced and additional recreational areas for residents and for the tourists who provide a major source of income for the area. A major benefit will be the protection of State Highway A1A.

Duval County Beaches: Construction

Estimated Federal Cost	$5,400,000
Estimated Non-Federal Cost	3,500,000
Federal Funds Through FY 84	0
President's Budget FY 85	3,900,000
Corps Probable Capabilities FY 85	3,900,000
State of Florida Request FY 85	3,900,000

Project Sponsor: City of Jacksonville

Project Description:

This is a proposal for scheduled renourishment of approximately 10 miles of Duval County Beaches. The first nourishment was carried out between 1978 and 1980. Since then, there has been a significant loss of beach from the effects of tides, storms, and winds. This renourishment will be phased over a three year period with about three-fifths of the total work to be carried out in FY 85.

Project Justification:

Renourishment is an authorized element of the original beach nourishment project. The beach loss since the first nourishment has been sufficient to prompt the present need for renourishment anticipated at that time. The project will protect coastal development and preserve a major recreation site, important both to local residents and tourists.

Indian River County Beach Nourishment: Construction
(Continuing Planning and Engineering)

Estimated Federal Cost	$236,000
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	65,000
President's Budget FY 85	0
Corps Probable Capabilities FY 85	171,000
State of Florida Request FY 85	171,000

Benefit Cost Ratio: 2.0:1

Project Sponsor: Indian River County

Project Description:

This is a beach nourishment project in two separate beach areas, Sebastian Inlet State Park and an area fronting the City of Vero Beach. Indian River County is acting as local sponsor for the Vero Beach Segment and the Florida Department of Natural Resources will perform that function for Sebastian Inlet Park. Indian River County is requesting funds only for the Vero Beach segment (1.7 miles of beach). FY 85 funding will be needed to complete preconstruction planning.

Project Justification:

The project is intended to restore public recreation and provide flood damage prevention for an area of severely eroded beaches. Benefits to be derived from beach nourishment in this area are increased recreational space provided by the added material, prevention of storm damage to private and public property, and the reduction of the need for storm protection structures, such as seawalls, revetments, groins, bulkheads, etc., which themselves lead to further beach erosion.

Monroe County Beach Erosion Control: Construction
(Continuing Planning and Engineering)

Estimated Federal Cost	$218,000
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	50,000
President's Budget FY 85	0
Corps Probable Capabilities FY 85	168,000
State of Florida Request FY 85	168,000

Benefit Cost Ratio: 1.8:1

Project Sponsor: City of Key West

Project Description:

This project would restore Smathers Beach in Key West, fill the adjacent east and west shorelines with sand, and allow periodic nourishment of the beach for 50 years. Two groins would be constructed and a boat ramp would be relocated. The plan also includes filling nearshore depressions and planting seagrass. The total project would extend for 9,400 feet of beachfront. FY 85 funding would be used to complete preconstruction planning.

The project area was created in the late 1920's by the construction of South Roosevelt Boulevard and the adjacent seawall. The Corps concluded in a 1957 study that prior to 1957 a sandy beach periodically existed in the area for short periods of time. The 3,000 foot long Smathers Beach was constructed between March 1959 and April 1960, and consisted of a rock core and a sand cover blanket two feet thick. Four groins were left in place at 1,000 foot intervals along the beach. A site inspection by the Corps in 1978 indicated that a sand blanket was present only on the western half of the beach and the rock core is exposed at the surface over the entire eastern half of Smathers Beach.

Project Justification:

The project is expected to improve the local tourist economy and provide local employment benefits. The number of users of the beach is projected to increase to 450,000 per year by 1989.

Ocean Ridge-Briny Breezes Beach Restoration: Construction (Palm Beach County)

Estimated Federal Cost	$2,657,000
Estimated Non-Federal Cost	2,657,000
Federal Funds Through FY 84	0
President's Budget FY 85	0
Corps Probable Capabilities FY 85	2,657,000
State of Florida Request FY 85	2,657,000
Benefit Cost Ratio: 1.8:1	

Project Sponsor: Palm Beach County

Project Description:

This project is a segment of Palm Beach County's on-going overall beach restoration plan. This segment is for 2.6 miles from a point 300 feet south of the South Lake Worth Inlet southward to the south Briny Breezes city limit. The project is designed to provide beach restoration and hurricane protection.

Project Justification:

The project is consistent with other segments of the overall Palm Beach County Beach Nourishment Plan. The barrier would protect a major highway (A1A) and other structures from erosion and undermining, reduce or eliminate maintenance costs for structures designed to provide protection from storms and afford protection for and increase the recreational area of the two County parks in the project limits.

Panama City Beaches Erosion Control and Hurricane Protection Project: Construction (Continuing Planning and Engineering)

Estimated Federal Cost	$2,860,000
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	500,000
President's Budget FY 85	400,000
Corps Probable Capabilities FY 85	800,000
State of Florida Request FY 85	800,000
Benefit Cost Ratio: 3.5:1	

Project Sponsor: Bay County

Project Description:

This project is designed to provide beach restoration and hurricane protection for 18.5 miles of Panama City Beaches. Panama City is in Bay

County in the Florida Panhandle approximately 100 miles southwest of Tallahassee. Beach restoration projects in the Panama City area have been in various stages of planning since a 1970 Congressional authorization of a study of the beaches of North Florida. The study's final feasibility report was released in 1976 and included the Panama City beaches.

The feasibility report recommended that a system of dunes and berms be constructed between Philips Inlet and the Panama City Entrance Channel, a distance of 18.5 miles. Public and private access would be provided by 290 dune bridges. The study also recommended revegetation along the beach line, parking, sanitary facilities, and periodic beach nourishment.

Project Justification:

The Panama City beaches are the most heavily used beaches in the Florida Panhandle. The beach area is known as the "Miracle Strip", and it is very extensively developed. The primary problem this project would deal with is the vulnerability of the oceanfront to direct wave attack during storms. Florida's Northwest Gulf Coast is periodically battered and flooded by hurricanes, tropical storms, and other severe weather conditions which significantly erode the beaches and cause damage to coastal construction. Hurricane Eloise struck Panama City in 1975 and caused more than $80,000,000 in property damage along the beaches in the project area.

The project's local sponsor, the Bay County Board of Commissioners, expects the total annual visitation to the project area beaches to increase from 5.6 million in 1970 to 33.6 million in 2030. The beaches in their currently eroded condition simply to not provide the space necessary to accomodate this massive increase in visitation. The proposed project would help alleviate this problem.

Pinellas County Beaches: Construction

Estimated Federal Cost	$700,000
Estimated Non-Federal Cost	700,000
Federal Funds Through FY 84	300,000
President's Budget FY 85	400,000
Corps Probable Capabilities FY 85	400,000
State of Florida Request FY 85	400,000

Project Sponsor: Pinellas County

Project Description:

Pinellas County, with St. Petersburg as its principal municipality, has the highest population density in Florida. This request is for beach protection work at two of the County's beaches, Redington Shores and the northern end of Long Key. The Corps of Engineers has indicated to us that funding in the President's FY 85 Budget for the Pinellas County Beaches Project ($400,000) plus carry-over funding from FY 84 would be sufficient to complete the requested work.

At Redington Shores Beach, a 400-foot-long breakwater would be constructed immediately offshore of a County-owned public park beach. The breakwater would prevent direct wave erosion and also slow the littoral transport of sand, thus enhancing deposition of sand along the beach.

On Long Key, approximately 2,400 feet of beach would be renourished (from Blind Pass to the south). A breakwater would also be constructed immediately offshore.

Project Justification:

At present, there is no beach at Redington Shores Beach. This innovative project, if successful, would maintain a beach which may be constructed during FY 84. The beach would provide protection for upland property, State Highway 699 in particular. The renourishment on Long Key would provide increased protection and recreational opportunities to an area with a badly eroded beach.

Sarasota County Beaches (Venice-Casperon Beach): Construction (Continuing Planning and Engineering)

Estimated Federal Cost	$250,000
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	0
President's Budget FY 85	0
Corps Probable Capabilities FY 85	250,000
State of Florida Request FY 85	250,000

Project Sponsor: Sarasota County

Project Description:

Sarasota County is on the west-central coast of Florida about 50 miles southwest of Tampa. The County coast consists of five barrier islands separated by tidal inlets. The Corps of Engineers is now nearing completion of a feasibility study for Sarasota County Beaches. Thus far, the study indicates a positive benefit-cost ratio, especially for Venice-Casperson Beach. Erosion problems are particularly severe there. The most likely source of sand for the project is offshore, and the Corps expects no unusual environmental problems. FY 85 funding would be used for preconstruction planning.

Project Justificiation:

Some of Sarasota County's beaches have eroded by more than 200 feet in the last 100 years. The County is experiencing explosive population growth, and adequate beach recreation should be provided for this population and for the ever-increasing number of tourists who visit the area. In addition, the destruction of abutting property (including residences, multi-family developments, public roadways, and utility facilities) should be prevented.

Brevard County Beach Erosion: Study

Estimated Federal Cost	$295,000
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	0
President's Budget FY 85	0
Corps Probable Capabilities FY 85	150,000
State of Florida Request FY 85	150,000

Project Sponsor: Brevard County

Project Description:

This study would be essentially an update of a 1967 Corps of Engineers beach erosion study. Brevard County is located on the east central Florida Coast and includes Cape Canaveral and the John F. Kennedy Space Center. The 1967 study recommended restoration of the Cape Canaveral and the Indialantic-Melbourne beaches. These two projects were completed in 1975 and 1980, respectively, and periodic renourishment was recommended for both projects. Continued erosion of these restored areas and of the County's unrestored beaches suggests a need for a restudy of current annual erosion rates, projected impact of continued erosion, and estimated schedule for renourishment. The study would also provide specific recommendations for erosion control. The Corps agrees that a restudy of beach erosion problems in Brevard County is needed. FY 85 funding would allow the study to begin.

Project Justification:

This study would determine the amount of material required to replenish sand lost to erosion by wave action, the renourishment schedule, and methods to reduce the erosion. The replenished sand would provide a barrier that would protect upland structures from erosion and undermining and reduce or eliminate maintenance costs for structures now in place that were designed to reduce storm damage to the beach. The addition to the beach would provide enhanced and additional recreational areas for residents and for the tourists who comprise a major source of income for the area.

Flagler County Beach Erosion Control: Study

Estimated Federal Cost	$135,000
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	20,000
President's Budget FY 85	0
Corps Probable Capabilities FY 85	115,000
State of Florida Request FY 85	115,000

Project Sponsor: Flagler County

Project Description:

This study was initiated in 1977 to assess the condition of the beaches along the shores of Flagler County and to develop appropriate recommendations and corrective measures. The study area encompasses the entire 18 mile Atlantic Ocean shoreline of Flagler County in Northeast Florida.

Although much of the shoreline area is not developed, a massive residential community (ITT Palm Coast) is being designed and constructed in the northern part of the County. This and related development increases the need for a local coastal zone management plan. This study will greatly assist the County in the preparation of that plan and could allow prudent development without the need for costly structural protection projects.

Project Justification:

This study will provide technical data on the erosion and storm damage processes of the Flagler County coastline. The study is emphasizing nonstructural erosion control measures. This should help to prevent inappropriate development along the Flagler County beaches. Prevention of shoreline erosion problems through land use planning is much less costly than relying on structural corrective measures.

Florida Statewide Beaches Study

Estimated Federal Cost	To be determined
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	0
President's Budget FY 85	0
Corps Probable Capabilities FY 85	$1,080,000
State of Florida Request FY 85	1,080,000

Project Sponsor: Florida Department of Natural Resources

Project Description:

This new proposal is for a statewide study of the status and dynamics of the coastal processes affecting Florida's beaches. The study will provide a much-improved technical basis for assessing future coastal changes (whether man-induced or natural) by systematically collecting essential data and identifying the factors that cause coastal changes. First year funds would establish a statewide data collection network built upon the existing data bases, create a storm assessment system, and begin an intensive data collection effort along the 97 miles of shoreline from Juno Beach to Florida City (along Florida's southeast coast). Study authorization is now being sought.

Project Justification:

The coast of Florida, which includes 800 miles of high quality sand beaches, is undoubtedly the State's most valuable natural resource. This study will provide vital information for coastal resource management. Benefits will include: 1) a better scientific basis for decisions on coastal development, 2) improving the effectiveness and reducing the cost of future coastal works, 3) an improved basis for preventing storm damages, 4) improved basis for regulatory decisions, such as the Coastal Construction Control line, and 5) a better understanding of the longterm effects of rising sea level.

ENVIRONMENTAL RESTORATION AND ENHANCEMENT

Biscayne Bay Survey Review: Study

Estimated Federal Cost	$1,605,000
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	180,000
President's Budget FY 85	0
Corps Probable Capabilities FY 85	750,000
State of Florida Request FY 85	750,000

Project Sponsor: Dade County

Project Description:

This study is a comprehensive review of environmental impacts from Federally authorized and constructed projects in and adjacent to Biscayne Bay, Dade County, Florida. The Corps of Engineers, acting as the lead Federal agency in cooperation with the Federal Department of Transportation, is reviewing such projects as the Intracoastal Waterway, Government Cut, Bakers Haulover Inlet, the Central and Southern Florida Flood Control Project, and causeway construction to determine whether these and other Federally authorized projects are having a detrimental impact upon Biscayne Bay and should be modified to improve the biological habitats and water quality of the bay. The study is addressing, but is not limited to, the effects of dredging and filling on circulation patterns and the flushing of problem areas, the effect of spoil islands on water quality, and the effects of modified freshwater inputs to Biscayne Bay on biological communities and water quality. FY 85 funding will be needed to continue the study.

Project Justification:

Biscayne Bay and the adjacent shoreline have been subjected to intense development and alterations from Federally authorized construction projects. The cumulative impacts of these projects on Biscayne Bay are not known. However, locally funded studies have determined that water quality in the bay is poor, especially north of Rickenbacker Causeway. Excessive

turbidity and reduced flushing are major problems. The information being generated by this study is needed for the development of guidelines for future use of the bay. A successful project will result in improved environmental quality of Biscayne Bay and enhancement of recreational opportunities.

Golden Gate Restoration: Study

Estimated Federal Cost	$1,289,000
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	887,000
President's Budget FY 85	0
Corps Probable Capabilities FY 85	402,000
State of Florida Request FY 85	402,000

Project Sponsor: South Florida Water Management District

Project Description:

This study is examining the feasibility of redeveloping the water management system of the Golden Gate Estates (GGE) area. The system of canals and other drainage works constructed in the 1960's to provide drainage in the GGE area resulted in substantial damage to the land and water resources of western Collier County (Southwest Florida). Problems include disruption of natural flow patterns, major reductions in water table levels, increased salt water intrusion, frequent and severe wildfires, and abandonment of thousands of acres of prime agricultural lands. There are also indications that the Golden Gate canal system is interfering with water flows to the Big Cypress National Freshwater Preserve and lower estuarine areas of the Everglades National Park. Furthermore, recent engineering studies indicate that the system is inadequate as a flood control system and cannot pass a one-in-ten-year storm without flooding. FY 85 funding will be needed to complete the study.

Project Justification:

The environmental disturbances which have resulted from the GGE canal system are substantial and well documented. They include: 1) disruption of natural flow patterns and major transfers of water from one basin to another; 2) lowering of wet season water tables by as much as two to eight feet; 3) a reduction of the hydroperiod by two or three months; 4) increasing frequency of wildfires; and 5) increasing annual runoff by two to three times.

A redevelopment of this system is considered to be mandatory in order to mitigate continuing and severe disruptions to the water and land resources of not only the GGF area itself, but also areas north of GGE, and estuarine areas of Southwest Florida, particularly Fahka Union Bay and Naples Bay. If the present canal system is not significantly modified, adverse effects may also be felt in the nearby Corkscrew Sanctuary and in some estuarine areas of Everglades National Park.

Miami Bayfront Park: Study

Estimated Federal Cost	$200,000
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	0
President's Budgety FY 85	0
Corps Probable Capabilities FY 85	200,000
State of Florida Request FY 85	200,000

Project Sponsor: Dade County, City of Miami

Project Description:

This proposal is for a 28 acre park located on Biscayne Bay in downtown Miami. The park has been in existence since 1925, but until 1980 there was no overall plan for park development and the park has never been an active, user-oriented facility. In 1980, the City of Miami commissioned a Master Plan for Bayfront Park. Federal funding has been appropriated for some of the components of the plan, and the local sponsor is now seeking additional Federal funding. However, the Corps has indicated that the remaining portions of the project may not qualify for Federal funding, but that a Corps feasibility study could address this and related issues. FY 85 funding would be used for this study.

Project Justification:

The downtown Miami area lacks developed open space to provide recreational opportunities for residents and for visitors. This park will provide the needed recreation and also bring additional economic development to the area.

Six Mile Cypress Study

Estimated Federal Cost	$403,000
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	209,000
President's Budget FY 85	0
Corps Probable Capabilities FY 85	194,000
State of Florida Request FY 85	194,000

Project Sponsor: Lee County

Project Description:

This study is addressing two possible management actions: purchase of a portion of Six Mile Cypress in Lee County and construction of permanent water control structures. The Six Mile Cypress Strand is one of the last major relatively-undisturbed cypress areas in Lee County. The strand is located approximately three miles southeast of Fort Myers and runs from State Road 82 southwesterly for ten miles to its juncture with Ten Mile Canal. Over the past several years, development pressures have begun to encroach upon the strand. Overdrainage has occurred and exotic plants have begun to replace the native cypress. The Six Mile Cypress Strand forms a natural buffer between the Fort Myers urban area to the west and the proposed Regional Airport to the east. A referendum for the public purchase of a major portion of the strand was overwhelmingly approved by the citizens of Lee County in November of 1976.

Project Justification:

The Six Mile Cypress Project would protect a unique natural cypress strand from overdrainage and enhance new cypress tree growth in areas which historically supported such vegetation. This strand of cypress would also provide a natural buffer between the Regional Airport and the urbanized Fort Myers area.

Tampa Bay Habitat Restoration Study

Estimated Federal Cost	$500,000
Estimated Non-Federal Cost	0
Federal Funds Through FY 84	0
President's Budgety FY 85	0
Corps Probable Capabilities FY 85	100,000
State of Florida Request FY 85	100,000

Project Sponsor: Tampa Bay Regional Planning Council

Project Description:

This is a proposed study of the overall condition of Tampa Bay and could lead to restoration of this important estuarine system. Tampa Bay is a large estuary on the Central Gulf Coast of Florida. The Tampa Bay area is highly urbanized with the cities of Tampa and St. Petersburg located on opposite sides of the bay. Urbanization has led to severe water quality problems. Construction and maintenance of the Tampa Harbor Channel have severely impacted the bay with spoil islands obstructing circular flow and tidal flushing. Phosphate mining and processing immediately inland and along the shores of Tampa Bay also have had a deleterious effect. The study would evaluate long-term habitat improvement, improvement in water quality, and associated recreational and economic benefits. The study also would develop a means for managing estuarine resources at the local and regional level.

Project Justification:

Recent analyses indicate that 44% of the original mangroves and marshes of Tampa Bay have been destroyed and 81% of the original seagrasses have disappeared. Fisheries and other resources have declined sharply. This study would identify optimum sites for restoration in order to help reduce current trends in declining natural resources. It would identify the most economically beneficial implementation measures and restoration sites. Long-term benefits would be realized in improved habitats and associated fisheries. Also, identifying measures to remedy damage caused by long-term maintenance dredging will benefit local port authorities, shipping interests, and the general public.

CODE 710 RECREATION STUDY

Project: Virginia Key Park

Funding Request: $100,000

Project Description:

This is a new feasibility study, sponsored by the City of Miami, of the environmental enhancement of the last underdeveloped, publicly owned, waterfront property in the Miami area. Virginia Key is part of a chain of barrier islands which enclose Biscayne Bay. It is only about six miles from downtown Miami.

Virginia Key, about 1005 acres, is a complex mix of environmentally sensitive areas ranging from tidal flats to mangroves to a narrow eroded beach fronting the ocean. There is a major sewage treatment plant and an abandoned landfill on the island. On the southeast side of the island are some public facilities - a ball field and some beach and park buildings. The remainder of the island consists primarily of tidal flats and mangroves and is an important nesting ground for migratory birds and bald eagles.

The City of Miami hopes to develop Virginia Key in a manner that will protect the fragile and ecologically significant tidal flats, lagoon, coastal hammock, and mangroves while facilitating access for beach users and allowing bicycling, canoeing, fishing, environmental and wildlife studies, camping, and similar outdoor activities. The tidal flats and lagoon will be protected by excluding motorized boating, low altitude aviation and other activities with the potential of disturbing the habitat of the area. The coastal hammock and dune will be revegetated and protected by construction of a boardwalk and deck system for crossing over these sensitive areas. Facilities to be constructed include rest rooms, changing areas, food concessions stands, picnic areas, shelters, and playing fields. Other planned facilities include an area for tents and limited recreational vehicle camping, a visitor and environmental studies center with nature trails and boardwalks through the coastal hammock, and classrooms for educational programs and lectures.

Project Justification:

Virginia Key, as the last underdeveloped parcel of waterfront land in the City of Miami, could provide a natural resource oriented recreational facility for a population which otherwise might not be able to easily access open space, wildlife, and outdoor recreation. The preservation of tidal flats, mangroves and coastal hammocks and the protection afforded to wildlife, especially wading and migratory birds and bald eagles, are also part of the development plan.

APPENDIX

Governor and Cabinet Resolutions
Cross Florida Barge Canal

RESOLUTION

WHEREAS, the Governor and Cabinet of Florida, sitting as Head of the Department of Natural Resources, on August 1, 1972, rescinded their previous policy supporting completion of the Cross Florida Barge Canal through the Oklawaha River Valley and on that date suspended their support of this project until such time as:

1. A new benefit-cost ratio study, which includes up-to-date interest rates and construction costs and re-evaluation of recreational benefits, is completed and demonstrates to the satisfaction of the State that this is a wise expenditure of taxpayers funds.

2. An environmental impact statement, as required by Section 102 of the National Environmental Policy Act, is completed and available to the State for final evaluation as to the environmental effects of the Canal.

WHEREAS, restudy documents were prepared and released by the U. S. Corps of Engineers in the summer of 1976 and did contain a draft environmental impact statement and a benefit/cost ratio study displaying up-to-date interest rates which were additionally updated in December 1976; and

WHEREAS, the Governor and Cabinet of Florida, sitting as the Head of the Department of Natural Resources, on December 16 and 17, 1976, did consider the restudy documents and take public testimony relative to the Cross Florida Barge Canal;

NOW THEREFORE BE IT RESOLVED THAT:

A. The Governor and Cabinet, sitting as the Head of the Department of Natural Resources, and recognizing the authority of the United States Congress to complete the canal, respectfully:

1. Recommend against completion of the Cross Florida Barge Canal Project.

2. Request the United States Congress to de-authorize the Cross Florida Barge Canal Project.

3. Recommend to the United States Congress that it authorize and appropriate sufficient funds for federal participation in and implementation of the following recommendations:

(a) Establishment of a State-Federal Task Force to study and recommend the best disposition and use of the canal lands with special emphasis on:

(1) Restoration of the Oklawaha River, its designation as a wild and scenic river, and its inclusion in the Ocala National Forest;

(2) Use of other remaining canal lands for public recreational and environmental purposes especially to meet the present and future needs of the canal-area counties; and

(b) Lands previously supplied by the State of Florida to the Federal Government and not necessary for use by the Federal Government for a wild and scenic river system or Ocala National Forest be returned to the State of Florida.

4. Direct the staff of the Department of Natural Resources to coordinate state efforts in an interagency State-Federal Task Force to study and recommend the best disposition and use of the canal lands with special emphasis on restoration of the Oklawaha River, its designation as a wild and scenic river, and its inclusion in the Ocala National Forest.

5. Direct the Division of State Planning of the Department of Administration to study and make specific recommendations for applications to be made by the State of Florida to the United States Congress for funding of sewage treatment construction projects in the State of Florida, for federal impact funds for economically depressed areas, as well as other federal funds which will have an impact on the State of Florida.

B. The Governor and Cabinet, sitting as the Head of the Department of Natural Resources, recommend to the 1977 Florida Legislature that:

1. The responsibilities of the Canal Authority be amended in order to retain public ownership of the lands associated with the project as necessary to accomplish "A" above.

2. Legislation be enacted which will permit appropriate title to be secured for those lands currently held in easement as necessary to accomplish "A" above.

3. Title to the lands associated with the project retained by or returned to an agency of the state be transferred to the Trustees of the Internal Improvement Trust Fund.

4. Chapter 374, Florida Statutes, Part II (Sections 374.301-374.521) be repealed and any funds remaining in the accounts of the Cross Florida Canal Navigation District and not legally obligated, be returned to the counties in the District on a prorata basis, established by the tax monies furnished to the District by these counties.

5. Section 20.25(12), Florida Statutes, be amended to read "The canal authority of the State of Florida, created under part I of Chapter 374, is transferred by a type three transfer to the Department of Natural Resources and the functions shall be assigned to the Division of Resource Management".

6. All such state lands determined not to be necessary for recreation, wildlife or environmental preservation be sold at public sale to the highest bidder and the funds derived be refunded to the counties involved on a prorata basis in the manner established by the tax monies furnished by these counties for the Cross Florida Canal Navigation District. The total monies refunded to the various counties are to be calculated by converting the actual amount furnished to its present dollar value giving the effect of interest charged at average market rates being compounded annually over the total period of financial commitment. Should the funds so derived be in excess, any surplus will be returned to the different counties on a prorata basis. Should the funds so derived be insufficient, the Governor and Cabinet, sitting

as Head of the Department of Natural Resources, recommend to the Florida Legislature that they appropriate sufficient funds to fulfill this obligation.

C. The Governor and Cabinet, sitting as Head of the Department of Natural Resources, direct the staff of the Department of Natural Resources, upon approval and implementation of "B.5", to prepare any additional legislative recommendations for use or disposition of resources and facilities of the project consistent with the above recommendations.

DONE AND EXECUTED at Tallahassee, Florida, this 17th day of January, 1977, A. D.

Reubin O'D Askew
Governor

Bruce A Smathers
Secretary of State

Robert L. Shevin
Attorney General

Gerald A Lewis
Comptroller

Bill Gunter
Treasurer

Commissioner of Agriculture

Ralph D. Turlington
Commissioner of Education

ATTEST:

Mary C. Nowak
Secretary

As and Constituting the Head of the
State of Florida Department of
Natural Resources.

State Of Florida

RESOLUTION

WHEREAS, the Governor and Cabinet, sitting as head of the Department of Natural Resources, on December 16 and 17, 1976, considered extensive testimony concerning the economic justification and environmental effects of the Cross Florida Barge Canal; and

WHEREAS, by resolution adopted January 17, 1977, the Governor and Cabinet recommended against completion of the Cross Florida Barge Canal Project and requested the United States Congress to deauthorize this Project; and

WHEREAS, the Florida Legislature in 1979 adopted Chapter 79-167, Laws of Florida, which provided for the orderly disposition of Canal lands and facilities upon deauthorization of the Cross Florida Barge Canal Project by the United States Congress; and

WHEREAS, Chapter 79-167, Laws of Florida, provides for refunds to counties contributing ad valorem tax dollars to the Cross Florida Barge Canal Project, plus interest from the date of such contributions, and interest assessments thereunder continue to accrue against Canal assets; and

WHEREAS, litigation has been filed seeking reversion of Canal lands to former landowners which in some instances has been successful; and

WHEREAS, S. 1131 and H.R. 2695 have been filed in the United States Congress and Congress has under consideration the deauthorization of the Cross Florida Barge Canal Project.

NOW THEREFORE BE IT RESOLVED THAT:

The Governor and Cabinet of the State of Florida, recognizing the authority of the United States Congress to require completion of the Canal, respectfully:

1. Recommend against completion of the Cross Florida Barge Canal Project.

2. Request the United States Congress to deauthorize the Cross Florida Barge Canal Project.

3. Recommend the United States Congress appropriate sufficient funds to purchase Canal lands located in the Oklawaha River Valley and included in the extended boundary of the Ocala National Forest as specified in Section 253.781, Florida Statutes.

DONE AND EXECUTED at Tallahassee, Florida, this the 3d day of August, 1983, A.D.

Bob Graham
Bob Graham
Governor

George Firestone
George Firestone
Secretary of State

Jim Smith
Jim Smith
Attorney General

Gerald Lewis
Gerald Lewis
Comptroller

Bill Gunter
Bill Gunter
Treasurer

Doyle Conner
Commissioner of Agriculture

Ralph D. Turlington
Ralph D. Turlington
Commissioner of Education

STATEMENT OF THE CANAVERAL PORT AUTHORITY

Gentlemen:

In testimony last year, we described the scope and benefits of the project and the necessity to proceed in an expeditious manner with the construction of the project.

I would like to take this opportunity to bring the Committee up to date on the history and current status of this project.

The Legislative history of this project follows:

- The project was authorized by Congress in 1962.
- $80,000 was appropriated by Congress for the Corps of Engineers' restudy in FY-82.
- The Administration supported, and Congress appropriated, $885,000 in FY-83 for construction as an on-going project.
- In FY-84, the Army Corps of Engineers', Assistant Secretary, Civil Works, recategorized this project as a "resumption of construction" and did not include a line item request for funds.
- The Congress appropriated $3,000,000 for construction in FY-84.
- The House Conference Report No. 98-272, and the Committee on Appropriations on the 98th Congress in its report #98-27, directed the Corps to initiate construction in accordance with the traditional funding method.

A summary of the Corps action on this project follows:

- The Assistant Secretary of the Army Corps of Engineers, Civil Works, in a letter to the Port Authority dated March 18, 1983, reiterated his position that the West Turning Basin Project was categorized for budget purposes as a "resumption of construction." He indicated that he had asked the Corps to furnish an up-to-date benefit-cost analysis and that he would review the entire project at that time.
- The Jacksonville office, after an exhaustive two year study that yielded a most favorable benefit-cost ratio approaching 3, submitted their draft economic analysis to the Office of the Chief of Engineers and Mr. Gianelli in June of 1983.
- The Jacksonville Office in their letter to the Canaveral Port Authority of November 2, 1983, established the following milestones for the project:

    September 1983 - Issuance of Draft Report and EIS to Office of the Chief of Engineers.

    February 1984 - Issuance and approval of final report.

    September 1984 - Award of dredging contract.

    September 1985 - Completion of the West Turning Basin.

- Mr. Gianelli, and the Office of the Chief of Engineers directed that the Jacksonville office complete the draft report and EIS to be issued in March, 1984, and over the objections of the Jacksonville Office, directed that they begin work on an additional study methodology which would delay the final report on the project for another two years.

- The Assistant Secretary of the Army (Civil Works), in a letter to Senator Paula Hawkins, stated that "this (West Turning Basin) project, especially since its principal benefits appear to be the speculative development of cruise ship traffic, CANNOT compete succesfully for funding."
- We have been advised that the Assistant Secretary of the Army, Civil Works, considers the language in the Bill itself binding upon him, but NOT the language in the Committee Report.
- As of this date, the draft report and EIS have not as yet been issued by the Corps of Engineers.

A summary of the Canaveral Port Authority action follows:

- During the early stages of the Jacksonville study in 1982, the lack of a market analysis was recognized by both the Corps of Engineers and the Canaveral Port Authority. In order to preclude a delay in the study, the Canaveral Port Authority hired a recognized economic consultant who conferred at length with the Jacksonville office to develop a methodology to be used for the market study.
- The first draft of the market analysis was submitted to the district office in August 1982. At the request of the Corps for additional information, part two of the analysis was submitted to the Corps in December, 1982.
- The economic consultant also made a benefit-cost ratio analysis based on his market study which yielded a benefit-cost ratio of 7.35 to 1.
- A Permit #76P-1246 dated 5/6/82 was issued by the Corps of Engineers to the Canaveral Port Authority for the West Turning Basin after reaching a mitigation agreement with the U.S. Fish and Wildlife.
- At the request of the Jacksonville Corps of Engineers' Office, the Canaveral Port Authority has obtained a permit from the Florida Department of Environmental Regulation for this project.

To summarize, the Assistant Secretary of the Army, Civil Works, direction for an additional two year study of dubious value is a transparent attempt to impede the mandate of the Congress and to extract cost sharing concessions from the Canaveral Port Authority for this project.

It is the position of the Canaveral Port Authority that this constitutes changing "the rules of the game" in mid-stream and we further contend that the use of taxpayers money to conduct another study of marginal value at this stage of the project is wasteful and inappropriate in this case. The Corps has had ample time to choose the methods of analysis and to conclude its report. To again single this project out for different treatment with its attendant delays strikes us as grossly unfair, in view of our good faith efforts to provide, at considerable time and expense, the economic and marketing data as well as the engineering studies, plans and specifications to meet our sponsor obligations.

The Assistant Secretary of the Army, Civil Works, fails to recognize that tourism and the cruise industry are an integral part of Florida's economic fabric. They are major industries in Florida with large capital investment and huge spin-offs in terms of supporting small business and creating new jobs. The tourism and cruise ship industry should be treated by the Corps in the same manner as other industries indigenous to other areas of this varied and diversified country of ours.

The magnitude of federal versus local contributions of this project, follow:

To date, the Port has spent approximately $700,000 on plans and specifications; engineering, geotechnical and economic studies, surveys, permits and mitigation.

Under the traditional cost sharing formula, local interests will spend approximately $2 million on containment dikes, relocation of underwater utility lines, mitigation and land enhancement.

After completion of the dredging by the Corps, the Port Authority plans to spend $35 to $40 million over the next 10 to 15 year period to construct the infrastructure, such as berthing facilities, piers, roadways, utilities, cargo and cruise terminals to develop this deep water basin.

Beyond the 10 to 15 year period, it is estimated that an additional $60 to $65 million will be spent by the Port Authority and private interests for such items as ship repair facilities, and floating drydock, cruise passenger hotel complex, etc.

The Port is jointly used by both military and civilian interests; however, if the West Turning Basin is not completed within the next 2 to 3 years, it is expected that the Canaveral Port Authority will not have sufficient berth capacity to continue to satisfy military requirements, which would require an expenditure by the military of approximately $7.2 million for a new dedicated berth on their side of the Port.It is obvious from the latest request from the military for additional dedicated berth space, coupled with the above described uses for the Western Turning Basin, that the project entails far more than "speculative development for cruise ship traffic".

Therefore, prompt completion of the West Turning Basin by the Corps would result not only in the establishment of new and varied shipping industries, but also in a cost avoidance by the Federal Government of $7.2 million for a military berth.

Custom receipts from Port Canaveral this year are expected to exceed $40 million. Revenue to the federal government from Customs can be expected to grow with Port cargo through-put which is forecast to double within a decade, providing we have the West Turning Basin in which to expand.

From the above, it is apparent that an initial investment of approximately 9.2 million by the federal government for dredging the West Turning Basin would be followed by approximately $100 million of investment by local interests. This is a cooperative effort between federal and local interests that is indeed, "cost sharing" in the very sense of the word. The federal government provides the "seed" money and the Port provides the infrastructure in terms of piers, warehouses, terminals, roads and utilities necessary to fully develop the deep water basin, providing jobs and enhancing the well-being of the community.

The master plan for development of the West Turning Basin projects the use of the basin and entrance channel for :

a) Future coal terminals, which is in the national interest.

b) Drydock and ship repair facility, which will not only service cruise ships but also military, commercial cargo ships, and the fishing fleet.

Port Canaveral is heavily utilized by both the military and NASA. The Department of Defense took by eminent domain, half of the Port's East Turning Basin. Subsequently, the Corps of Engineers planned for expansion of the Port into the West Turning Basin to replace the condemned area.

Our commercial piers are utilized by the home ported Military Sealift Command ships for layberths and for repairs. As port cargo and passenger business increases, additional facilities will be needed to support this expansion and to continue to meet the military requirement. We will run out of space in the dredged portion of the Port in less than two years.

The Revenue Passenger Count for FY-81, 82, 83 and projections for FY-84 and FY-85 follow:

1981 - 7,218 Actual
1982 - 192,784 Actual
1983 - 309,864 Actual
1984 - 390,000 Projected
1985 - 500,000 Projected

The West Turning Basin Project is urgently needed to move ahead in a timely fashion to :

a) Free up a $6 million cargo facility, temporarily being used as a cruise terminal, for a waiting cargo customer.

b) To bring on line two additional cruise terminals in the West Turning Basin by FY-87 and additional terminals at a rate of at least one per year thereafter.

It is the view of the Port Authority that it would be precipitious and indeed unfair, at this juncture, for the Federal Government to delay or postpone construction for the completion of this modest project, which will have a large multiplier effect in terms of economic well-being of the community by virtue of investment by the Port and Port related enterprises, that will create new permanent jobs.

The Port's financial position at this time is such that should the Federal Government not fund the West Turning Basin, this project would be delayed eight to ten years. Should the Port be required to assume 1/3 of the cost, the result would be three to five year delay. In both cases, the Port stands to lose potential business and economic well-being for the community.

In view of the foregoing, the Committee's support is requested to include specific language in the FY-85 Appropriations Bill itself, to:

- Use the current economic study of the Jacksonville Corps of Engineers Office which provides a benefit-cost-ratio approaching 3 to 1 at an 8-1/8 discount rate as sufficient justification for this project.
- Accept the mitigation agreement between the Canaveral Port Authority, U.S. Fish and Wildlife and the Corps of Engineers that resulted in the issuance of the Corps of Engineers Permit #76P-1246 dated 5/6/82.
- Direct the Corps to immediately commence final design engineering, and proceed with construction of the project as "an on-going project" in FY-85 with completion in FY-86.

CLOSING REMARKS

Senator DOMENICI. Thank you very much, gentlemen. We are glad to have you. Sorry we don't have more time to hear from all of you, but your ideas and facts are presented here in more detailed statements which will be incorporated and studied as part of this appropriation process.

Mr. Bishop, do you have anything further?

Mr. BISHOP. No, sir.

Senator DOMENICI. Who is accompanying you?

Mr. BISHOP. Mr. Walton of my staff.

Senator DOMENICI. Does he have a statement?

Mr. BISHOP. No.

Senator DOMENICI. If we have any questions from any Senators relevant to the projects we discussed, we will submit them to you in writing. Thank you very much for appearing and we are most appreciative.

Mr. BISHOP. Thank you, sir.

ANIMAS-LA PLATA AND DOLORES PROJECTS, COLORADO

STATEMENT OF J. WILLIAM McDONALD, DIRECTOR, COLORADO WATER CONSERVATION BOARD

Senator DOMENICI. Mr. William McDonald, director of the Colorado Water Conservation Board on various Colorado water projects.

Mr. McDonald, we welcome you. If you will take the witness table here.

Mr. McDONALD. Thank you, Mr. Chairman.

Senator DOMENICI. Do you have some prepared remarks?

Mr. McDONALD. I do, and they have been left with the staff. The statements cover both the Animas-La Plata and Dolores projects in our State.

Senator DOMENICI. Your remarks will be made a part of the record.

[The statements follow:]

STATEMENT OF J. WILLIAM MCDONALD, DIRECTOR, COLORADO WATER CONSERVATION BOARD

Introduction

I am J. William McDonald, Director and Secretary of the Colorado Water Conservation Board. I am testifying on behalf of the Honorable Richard D. Lamm, Governor of Colorado; Mr. David H. Getches, Executive Director of the Colorado Department of Natural Resources; and the Board itself, which is the state agency charged with the protection, conservation, and development of the water resources of the State of Colorado.

Summary of Requests

The State of Colorado urges Congress to maintain the funding levels included in the President's recommended budget for the Bureau of Reclamation and the Corps of Engineers. In addition to the President's recommended budget, we respectfully request for FY 85:

(1) appropriations in the amount of $5 million each for construction on the Animas-La Plata and Narrows projects, and

(2) an appropriation for continuing planning and engineering on the Westerly Creek flood control project in Denver and Aurora.

Bureau of Reclamation (Requested Increases)

We take exception to the President's recommended budget insofar as it does not contain funding for the Animas-La Plata and Narrows projects.

The Animas-La Plata project, which was authorized in 1968, is a joint Colorado-New Mexico project designed, among other things, to address many of the problems which confront the Indian reservations in the project area. Other components of the project will serve non-Indian populations in Colorado and New Mexico with municipal water. Finally, project water would significantly strengthen the irrigated agricultural economy of southwestern Colorado.

The Animas-La Plata project holds the potential of assisting in the resolution of the claims of the Ute Mountain Ute and Southern Ute Indian Tribes in Colorado to waters of the San Juan River Basin. Those claims have been filed and would have a dramatic impact on existing water users if successfully litigated. However, we believe that all parties understand that expensive and protracted litigation is in no one's interest.

The tribes have been a strong supporter of the Animas-La Plata project. We believe that they are aware that storage reservoirs are the best means by which to meet their water needs. The Animas-La Plata project will provide such storage.

The fulfillment of Indian reserved water rights is a national obligation which should be dealt with by the federal government. The Animas-La Plata project can provide a means to resolve the tribes' claims amicably.

Planning and pre-construction activities for the project have been completed and this committee has reported out a bill which includes $1.0 million for construction in FY 1984. In light of this, we respectfully request that $5.0 million be appropriated in FY 1985 for construction on the Animas-La Plata project.

The Narrows project was reauthorized by Congress in 1970. It will provide supplemental water to some of Colorado's most productive agricultural lands, municipal water to several rural communities, and significant recreational opportunities. Another project purpose will be flood control. Finally, important secondary benefits will accrue to downstream water users in Nebraska.

The Narrows Reservoir will be the largest water body in close proximity to the greater Denver metropolitan area. The project will yield numerous recreational benefits to the rapidly growing communities along Colorado's Front Range. For example, boaters now frequently travel over 200 miles to Lake McConaughy in Nebraska, while facilities in the metropolitan area are being used to their capacity. The Narrows project will substantially expand the area's water-based recreational resource to the benefit of well over a million people.

The project was in a construction status in 1977 when it was halted by the Carter Administration. At that time, activity on the project was suspended even though property acquisition and final engineering and design work were under way. In the last two fiscal years, the Bureau has updated the planning for the project, and is ready again to proceed with construction.

The House has passed a measure which includes funding for construction in FY 1984. Regrettably, this committee did not retain funding for the Narrows in the bill which it reported out. We strongly urge you to now include an appropriation for $5,000,000 for the Narrows Project in FY 1985.

As you well know, it has been some years since appropriations were made for the initiation of construction on a water resources project. The leadership of this committee in reporting out a bill last fall has done much to resolve the hiatus of the last several years.

That bill does not impose on the Animas-La Plata project any new requirements for non-federal, "up-front" financing. This is as it should be. Yet, President Reagan's January letter to Senator Laxalt revives doubts on the issue. We are anxious to work with Congress and the Administration in order to reach a solution to the issue of project financing.

Should Congress ultimately elect to adopt new requirements for non-federal financing, we wish to draw to your attention the readiness of Colorado to proceed. The Colorado General Assembly has authorized the Colorado Water Resources and Power Development Authority, which is a political subdivision of the state, to consider financial participation in the Narrows and Animas-La Plata projects. We only await final Congressional direction on how to proceed.

We also want Congress to be aware of the fact that Colorado has four other authorized projects--Fruitland Mesa, San Miguel, Savery-Pot Hook, and West Divide--to which we believe we are entitled. Indeed, we firmly believe that commitments have been made to use revenues from the Colorado River Storage Project (CRSP) hydropower system to achieve a certain level of development in the Upper Basin. If authorized projects are not going to be funded with Congressional appropriations, despite the fact that repayment would be made from CRSP power revenues, then CRSP power revenues should, in Colorado's opinion, be made directly available to the Upper Division states. This will enable those four states to finance the construction of water projects which will achieve a level of development equivalent to that represented by their authorized, but as yet unconstructed, CRSP participating projects.

Colorado has proposed that federal legislation be enactd which would amend the 1956 Colorado River Storage Project Act to make CRSP power revenues payable directly to the Upper Division states. Such funds would then be used by those states to finance water project construction in order that the level of development agreed to by Congress, the seven Colorado River Basin states, and the purchasers of CRSP power can be achieved. We believe that the agreement of these parties is embodied in the 1956 Act, in the 1968 Colorado River Basin Project Act, and in the acts amendatory thereto which have authorized participating projects of the Colorado River Storage Project.

Colorado advanced its proposal several months ago. Discussions are now ongoing with the other Colorado River Basin states, the power customers, and water users. This is a matter of the highest priority for Colorado and we intend to propose legislative language soon.

Bureau of Reclamation (Water Projects in the President's Budget)

For those items already included in the President's recommended budget, we urge that Congress maintain the funding levels requested. In particular, we support the requested funding for continuation of projects under construction. The President's recommended budget is adequate for the timely execution and continuation of these reclamation projects.

We would caution, however, that any reductions in the President's budget request, particularly for construction activities, would be detrimental to the water users of the State of Colorado and, in the instance of the Closed Basin project, to the interests of the states of New Mexico and Texas as well. Also, failure to pass an appropriations bill for FY 85, which would leave the Bureau and the Corps to operate on a continuing resolution, could cause several problems. We commend this committee for its efforts to report out a bill last year and look forward to your favorable action again this year.

Bureau of Reclamation (Colorado River Water Quality Improvement Program)

The seven states of the Colorado River Basin have endorsed a coordinated, basinwide approach to the reduction of salinity in the Colorado River. The salinity control projects being studied, planned, and constructed by the Bureau of Reclamation are an integral component of the overall salinity control program.

We support the President's budget request for this program. In addition, we would call your attention to the detailed testimony submitted on behalf of the seven basin states, acting through the Colorado River Basin Salinity Control Forum, in which testimony Colorado concurs.

Corps of Engineers

The sums contained in the President's recommended budget are, with the exception noted below, adequate for the timely execution and continuation of federal flood control programs in Colorado. We would caution, however, that any reduction in these budget requests would unnecessarily jeopardize the lives and properties of many thousands of Coloradans.

Especially important is the President's request for construction money for the South Platte River project below Chatfield Lake and for money for continuation of planning and engineering on the Fountain Creek project. Located in the heart of the Denver and Pueblo metropolitan areas, respectively, these are critical flood control projects. It is imperative that the construction which is being initiated in FY 84 on the South

Platte River project be maintained on schedule thereafter and that planning for the Fountain Creek project proceed in a timely manner.

We take exception to the failure of the President's recommended budget to include funding for the Westerly Creek flood control project in Denver and Aurora. The sum of $200,000 is needed in FY 85 for continuing planning and engineering. This project is vitally needed to enable local governments in the area to proceed on their own to solve problems upstream from the proposed federal project, which would be located on Lowry Air Force Base. The upstream problems cannot be addressed until the federal project goes forward.

I appreciate the opportunity to appear before you. Thank you for your time and consideration.

LIST OF WITNESSES

PROJECTS INVOLVED:
- Dolores Water Reclamation Project
- Animas-La Plata Water Reclamation Project

PROJECT SPONSORS:
- Southwestern Water Conservation District of Colorado
- Animas-La Plata Water Conservancy District
- Southern Ute Indian Tribe
- La Plata Water Conservancy District
- Dolores Water Conservancy District
- San Juan County , New Mexico
- City of Farmington, New Mexico
- La Plata County, Colorado

REPRESENTATIVES IN PERSON OR BY STATEMENT:
- Frederick V. Kroeger, Board Member, Colorado Water Conservation Board
  - President, Southwestern Water Conservation District of Colorado
  - Board Member, Animas-La Plata Water Conservancy District
- Frank E. (Sam) Maynes, Attorney for Southwestern Water Conservation District of Colorado and Attorney for Southern Ute Indian Tribe, Ignacio, CO.
- Leonard C. Burch, Chairman, Southern Ute Indian Tribe, Ignacio, Colorado
- Chris A. Baker, Vice Chairman, Southern Ute Indian Tribe, Ignacio, Colorado
- Ernest House, Chairman, Ute Mountain Ute Indian Tribe, Towaoc, Colorado
- John D'Onofrio, Attorney for Ute Mountain Ute Indian Tribe
- John Murphy, President, Animas-La Plata Water Conservancy District, Former Mayor, City of Durango, Colorado
- John Porter, Manager, Dolores Water Conservancy District
- R. T. Scott, Chairman, La Plata County Commissioners, La Plata County, CO.
- Ann Brown, Member of City Council, Durango, Colorado
- Brice Lee, Secretary/Treasurer, South Durango Water District, Member of Board of Directors, Animas-La Plata Water Conservancy District
- Clara May Schmitt, Secretary/Treasurer, La Plata Water Conservancy District
- John Schmitt, Board Member, La Plata Water Conservancy District
- Ray deKay, Acting Superintendent, Southern Ute Agency, Bureau of Indian Affairs
- Senator Dan Noble, Senator, State of Colorado
- Representative Ben Nighthorse Campbell, Colorado State Representative
- Art Isgar, Board Member, Animas-La Plata Water Conservancy District and La Plata Water Conservancy District
- Donald W. Schwindt, Board Member, Dolores Water Conservancy District and President of Montezuma Valley Irrigation District
- Bill Price, Board Member, La Plata Water Conservancy District
- Richard M. Dossey, Board Member, Animas-La Plata Water Conservancy District
- Jim T. Dunlap, Chairman, Board of Commissioners, San Juan County, New Mexico
- Quincy Cornelius, Water Coordinator, San Juan County, New Mexico

STATEMENT OF FRED V. KROEGER, PRESIDENT OF THE BOARD OF DIRECTORS, SOUTHWESTERN WATER CONSERVATION DISTRICT OF COLORADO

Mr. Chairman and Members of the Committee:

I am Fred Kroeger, President of the Board of Directors of the Southwestern Water Conservation District, member of the Colorado Water Conservation Board, and lifelong resident of La Plata County, Colorado. Today I join several other representatives of southwestern Colorado in making yet another appeal for funds for the Animas-La Plata Project. Although only a few of us have made the trip to Washington, D.C., this year to appear before this Committee, we represent the thousands of farmers, ranchers, businessmen, members of Indian tribes, and average citizens who have encouraged us to seek your help in obtaining $1,350,000 through the Energy and Water Development Supplemental Appropriations Bill for initial construction, and $5,000,000 in the Fiscal Year 1985 budget for secondyear construction.

Before proceeding further with my request in behalf of the Animas-La Plata Project, I think I should pause long enough to thank the Committee for its helpful support of the Dolores Water Reclamation Project, which achieved a truly significant step forward within the past two weeks when water storage actually began at the McPhee Dam and Great Cut Dike. Other components of this project are under construction now, and we are optimistic that the sequential steps programmed in the development of the Dolores Project will proceed on schedule. It certainly makes an excellent model for our people to point to as we try to gain support for its sister project, the Animas-La Plata.

The Animas-La Plata Project, as you know, was authorized by the Colorado River Basin Act of September 30, 1968 (P.L. 90-537), as a participating project under the Colorado River Storage Act of April 11, 1956 (P.L. 84-485). The intent of Congress was to establish a system of reservoirs for storing and allocating in an equitable manner the waters of the Colorado River and its tributaries between the states of the Upper Basin (Wyoming, Colorado, most of Utah, and parts of Arizona and New Mexico) and those of the Lower Basin (California, Nevada, most of Arizona, and parts of New Mexico and Utah), pursuant to the Colorado River Compact of 1922.

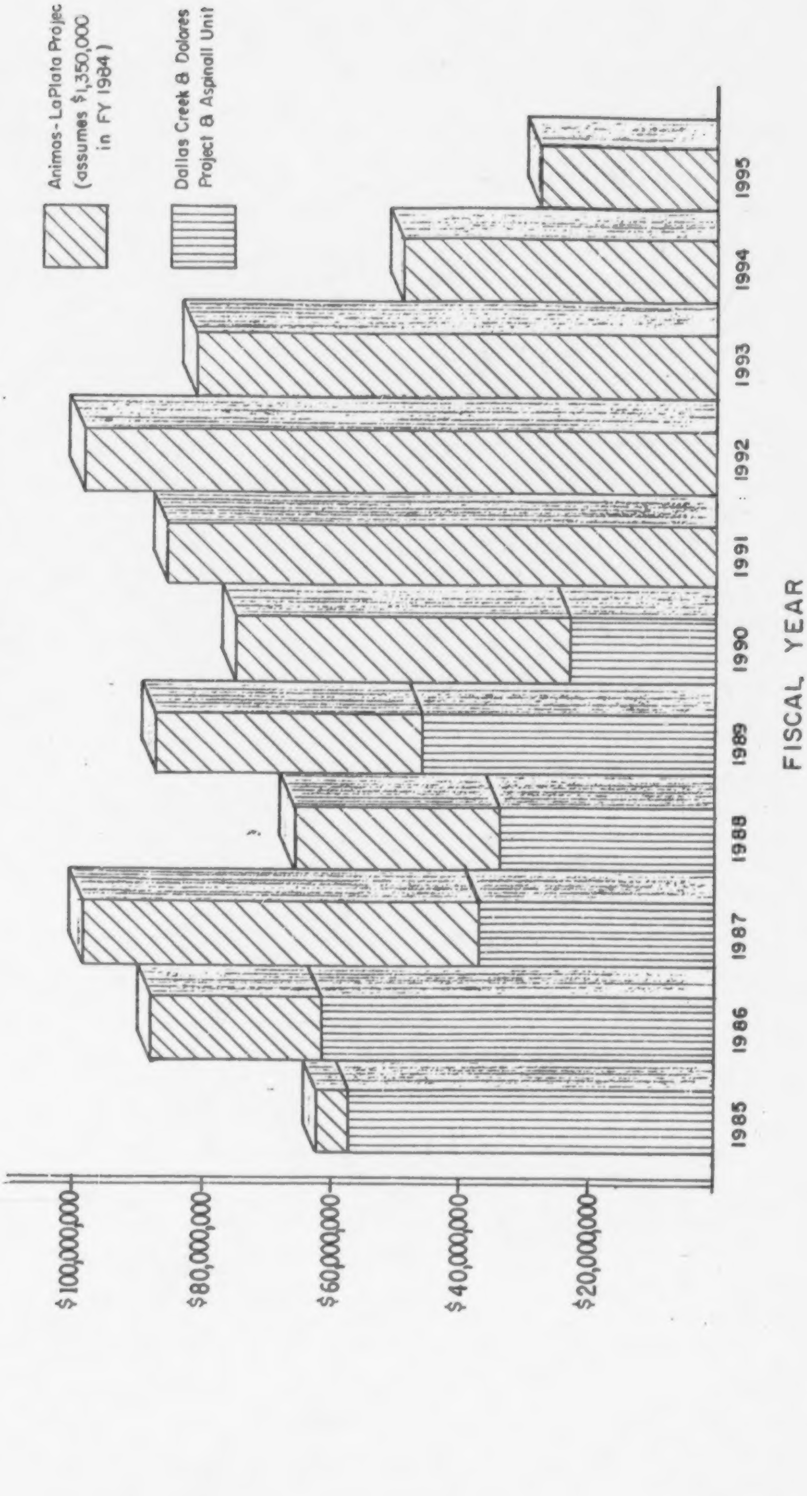
While it appeared initially that funding for Upper Basin water reclamation projects and those of the Lower Basin would be provided contemporaneously, such has not been the case. The Central Arizona Project, for example, is nearing completion, having cost a total of $1,110,341,604 through the end of Fiscal Year 1983 and having a Fiscal Year 1984 allocation of $166,100,000, according to Bureau of Reclamation figures. The Animas-La Plata Project, on the other hand, was the subject of investigative studies amounting to $1,092,682 prior to 1968, and it has received only $3,981,534 - all for advance planning - since 1968, the year it was authorized. The Central Arizona Project affords an example of vigorous effort on the part of the United States Government to fulfill its commitment to ensure adequate municipal and industrial water, as well as water for irrigation, to the region encompassed by that project. In contrast, the Animas-La Plata Project has not been permitted to reach the stage of initial construction, owing to the economies imposed by three successive Presidential administrations. Despite the years of effort devoted to feasibility studies, environmental statements, a definite plan report, litigation to overcome constitutional challenges, as well as reviews and confirmed evaluations by consultants, the Animas-La Plata Project remains the orphan of the water reclamation family, the neglected stepchild of a seemingly unmindful central government. Our communities have endorsed the Project, and our Governor and legislature have approved cooperative state funding. We desperately seek the federal support required to move the Project beyond the planning stage into the realm of positive accomplishment.

One special concern of Colorado proponents of the Animas-La Plata Project is the finite limit to the supply of water that can be expected from the Colorado River. Our state is entitled to 51.75% of the 7.5 million acre-feet of water allocated to the Upper Basin each year, according to the Colorado River Compact of 1922. This agreement apportioning the water of the Colorado River was reached after a series of years of plentiful precipitation, leading engineers to estimate that 16.4 million acre-feet was the total flow of the river. Since 1922, however, it has been found that the average annual flow is actually a mere 14 million acre-feet; hence, with current usage totaling approximately 12 million acre-feet, and with an increase to 13 million acre-feet predicted when the Central Arizona Project is completed, we can readily foresee that active users in the Upper Basin, the Lower Basin, and Mexico will move swiftly to consolidate what is already their entitlement, and will establish rights by timely usage for whatever additional waters are not being removed from the system by upstream claimants. Once lost through default, inaction, or litigation, the water to which Colorado has historically been entitled will be reduced, if not totally surrendered, for all time.

From this larger picture, let us move to consideration of the more local situation. Perhaps the critical significance of water to our section of southwestern Colorado is difficult to appreciate by those who enjoy the well-saturated garden spots of the Nation's capital. To illustrate our situation, though, let me point out that Washington, D.C., has an annual precipitation of approximately 40 inches, whereas Durango receives only 19 inches, and more than half of that occurs between October and the end of April. Thus, with only about seven inches of rainfall, and often less, during our growing season, we have to look to water reclamation projects to provide the moisture to ensure the survival of our crops, to help meet our municipal water requirements, and to develop such industry as we can attract to our area. Unless we capture the melting runoff from our mountains and store it in reservoirs in the spring for prudently managed use during our dry summers, we cannot hope to thrive.

As others will point out today, so will I too emphasize that the Southern Ute Indian Tribe and the Ute Mountain Ute Tribe will be among the beneficiaries of the Animas-La Plata Project. Both tribal groups have agreed to rely on specifically negotiated amounts of Project water for their municipal and industrial needs and for their agricultural requirements, in lieu of pursuing through expensive and prolonged litigation their rights to water from the Animas, the La Plata, the Florida rivers near their reservations. In light of the vast coal reserves on the Southern Ute Indian Reservation (estimated to total between 116,000,000 and 400,000,000 tons) and the Ute Mountain Ute Indian Reservation (estimated to be 39,000,000 tons), the reliance on water to develop this valuable energy resource can be readily understood. The U.S. Supreme Court ruled in 1908, under the "Winters Doctrine," that when the U.S. Government reserved land for Indian tribes, it also, by implication, reserved sufficient quantities of water for present and future uses of those tribes that occupy the reservation. There seems little doubt that tribal water claims would prevail if the issue of rights to the water of our local rivers were to be tested in court. It is, therefore, in the interest of Indians and non-Indians that the Animas-La Plata Project receive the requested funding.

In closing, let me ask the Committee to direct its attention once again to the matter of equity in its consideration of the needs of an admittedly moderately populated but an increasingly important part of our country, the Four Corners Region of the Southwest. As the major construction phases of other water reclamation projects are progressing beyond their critical stage, so that there is reasonable assurance of their being completed, now is certainly the time to begin applying funds and other resources to the long-neglected yet vitally essential Animas-La Plata Project.



Reclamation Construction Program
Western Colorado

JOINT STATEMENT OF LEONARD BURCH, CHAIRMAN, AND CHRIS BAKER, VICE CHAIRMAN, SOUTHERN UTE INDIAN TRIBAL COUNCIL

Mr. Chairman and Members of the Committee:

I am Leonard Burch, Chairman of the Southern Ute Indian Tribal Council. Joining me in my statement is Chris Baker, Vice Chairman of our Tribe. Today, in behalf of all members of the Southern Ute Indian Tribal Council, I am renewing the appeal that we have made annually for many years for the United States Government to appropriate the funds needed to get the Animas-La Plata Project under way. This is not a new project; it is one that has been studied and analyzed carefully over the years. We have been patient and we have trusted in the honorable intentions of those in the United States Congress who have pledged to protect our interests and to help us develop our tribal resources through wise storage and fair distribution of the waters of the rivers that should serve our reservation and its people. The Tribal Council prefers that we obtain our water rights by negotiation and through legislation rather than by litigation. The members of the Tribe, though, have begun to ask: How long must we wait? If water projects elsewhere have been approved and funded, why not this one? Did not the United States Government, through the Congress, promise that after the studies were completed construction would begin? And so, today, we must make still another appearance and yet another request that you stir the fires and rekindle the interest in this important undertaking.

As we have previously made known, the Southern Ute Indian Tribe and its sister tribe, the Ute Mountain Utes, depend on the Animas-La Plata Project for water for domestic use and, equally importantly, for agricultural and industrial use. Our future as tribal entities depends in great measure on the availability of water in sufficient amounts to enable us to develop what lies on and under the lands allotted to us. Only by making productive use of our resources can we achieve the level of economic independence and self-sufficiency so frequently urged on us as the ultimate objective of the United States Government.

In times of international crisis, America casts about impatiently for alternative sources of energy to support its people and its industries. The Southern Ute Indian Reservation in southwestern Colorado is an enormous repository of coal - coal to provide the power for industry far beyond the boundaries of our tribal lands and beyond the borders of our state. In no way can this valuable resource fulfill its potential without significant amounts of water; hence we look to the Animas-La Plata Project as the surest means of making the needed additional water available to our Tribe.

In all our negotiations over the rights of the Southern Ute Indians to the waters of the streams near our reservation, we have given respectful consideration to the needs of non-Indians. In cooperation with the Bureau of Reclamation, we have supported the construction of reservoirs that now serve Indians and non-Indians, thereby sharing our court-adjudicated water with neighboring non-Indian farmers and ranchers. We recognize the wisdom and the benefits of living in harmony with all. Accordingly, we have refrained so far from pressing our claims to the additional water to which we know we would gain legal entitlement. Nevertheless, evidence of good faith must be reflected in the actions of all parties involved. With this in mind, we seek your endorsement of the Energy and Water Development Supplemental Appropriations bill that will provide $1,350,000 for initial construction, and we urge your committee's approval of an allocation of $5,000,000 in the Fiscal Year 1985 budget so that second year construction can advance through the final planning stages and beyond.

Thank you for considering the needs of the Southern Ute Indian Tribe. I look forward to a continuation of our cordial working relationship.

STATEMENT OF ERNEST HOUSE, CHAIRMAN, UTE MOUNTAIN UTE INDIAN TRIBE

Chairman and Members of the Committee:

I am Ernest House, Chairman of the Ute Mountain Ute Indian Tribe. I am here today on behalf of the Tribe to express our gratitude to this Committee's past support for the Dolores Project, to urge its continued support for the Dolores Project, to firmly request your endorsement of the Energy and Water Development Supplemental Appropriations Bill, FY 1984, that will provide $1,350,000 for initial construction for the Animas-La Plata Project, and to strongly urge the Committee's approval of an allocation of $5,000,000 in the FY 1985 budget so that second year construction of the Animas-La Plata Project can advance through the final planning stages and beyond.

The Ute Mountain Ute Indian Tribe is centered in Towoac, Colorado. The reservation is located in an extremely arid region of southwestern Colorado. The lack of water for municipal use has required us to truck domestic water to our headquarters at Towoac. Though our lands are fertile, the lack of sufficient water for irrigation of our lands has often made the efforts of our farmers meaningless.

In anticipation of water delivery from the Dolores Project in 1990, the Tribe is currently spending over $600,000 for improvements to its domestic water system. The Tribe is also undertaking two irrigation demonstration projects at the cost of $279,000 to determine the most effective method of irrigating its farmlands.

In addition to these projects the Tribe is entering into a cooperative agreement with the Dolores Soil Conservation District for technical and managerial assistance in improving the use of tribal farmlands. Lines of communication have been opened with the City of Cortez and the Montezuma Valley Irrigation District with regard to possible cooperative agreements dealing with irrigation, municipal and industrial water treatment and delivery. We have formed the Ute Mountain Ute Water Resources Planning Task Force to make recommendations to the Tribe regarding the best use of our water.

The Dolores Project, while of great assistance to us, will provide only part of the irrigation, municipal and industrial water for our Tribe to be economically independent. The Animas-La Plata Project will provide the rest of the water needed. The Animas-La Plata Project, like the Dolores Project, was authorized by the Colorado River Basin Act of 1968, as a participating project under the Colorado River Storage Act of 1956. Yet construction on the Animas-La Plata Project has not begun, while other projects reach completion.

As we have demonstrated and continue to demonstrate with the Dolores Project, we are willing to work alongside our non-Indian neighbors to secure all of our rights under the various congressional Acts. However, years have gone by without the funding of the Animas-La Plata Project. We feel strongly that unless this Committee appropriates the needed sums to the Animas-La Plata Project we have no alternative but to pursue our rightful water claims through litigation instead of negotiation.

STATEMENT OF JOHN PORTER, MANAGER, DOLORES WATER CONSERVANCY DISTRICT

Mr. Chairman and Members of the Committee:

I am John Porter, Manager of the Dolores Water Conservancy District, project sponsor for the Dolores Water Reclamation Project. It gives me great pleasure to inform you that on March 19, 1984, water storage began at the McPhee Dam and Great Cut Dike. Such an event is a major milestone in the road to economic stability and vitality of Southwestern Colorado and, on behalf of the members of the Dolores Water Conservancy District, I wish to thank this Committee for its past support of the Dolores Project and respectfully request that the Committee support the administration's recommendation that the Dolores Project receive continued funding for construction in the amount of $41,248,000 (Section 5 and Section 8 construction money).

Not only did water storage begin at the McPhee Dam and Great Cut Dike as projected for Fiscal Year 1984, but the following projects are well on their way to completion as proposed for Fiscal Year 1984:

(i) McPhee Dam and Great Cut Dike;
(ii) Dolores Tunnel;
(iii) Dolores Sewer Treatment Plant; and
(iv) Substantial clearing of McPhee Reservoir Area.

The appropriation for the Dolores Project in Fiscal Year 1985 will allow for the continuation of the following projects:

(i) Great Cut Pump Plant and Reach 1 of the Dove Creek Canal;
(ii) Cultural Heritage Center;
(iii) Access Roads North of McPhee Dam;
(iv) Work on Recreation Areas; and
(v) Engineering and Design of Other Project Features;

and the commencement of the following projects:

(i) Farview Pumping Plant and Lateral System;
(ii) Cahone Pumping Plant and Lateral System; and
(iii) Reach 2 of Dove Creek Canal;

Fiscal Year 1985 will see the completion of Reach 1 of the Dove Creek Canal which is the beginning of the water delivery system to dry land. Approximately 60,000 acres of land which are dry farmed under marginal irrigation or not farmed at all should begin producing crops once construction is fully complete. A large portion of this land under new cultivation will be within the Ute Mountain Ute Indian Reservation. This is land which has never been productive that will become a major food producing area providing the much needed jobs for tribal members.

The Dolores Project also provides 7,700 acre-feet municipal and industrial water for the City of Cortez, the town of Dove Creek, the Dolores Water Conservancy District. Payment in excess of $18,000,000 will be paid to state and federal governments. In addition, 1,000 acre-feet of municipal and industrial water will be supplied to the Ute Mountain Ute Indian Tribe.

We believe that the Dolores Project, as all western water projects, has been a sound national investment, and we must hope that the appropriations needed for reclamation continue. However, the Dolores Project cannot solve all the problems associated with water shortage in the Four Corners region, and we would urge that initial construction funds for the Animas-La Plata Project also be appropriated. In addition to providing water for the irrigation of an additional 70,000 acres, the Animas-La Plata Project would provide water for the emerging population centers of Durango, Colorado, and Farmington, New Mexico. Additionally, the Animas-La Plata Project would assure a peaceful resolution to the Indian water rights claims which threaten to undermine the prior appropriation system which has served as the martyr of the water allocation system in the west.

Finally, let me express my gratitude and deep satisfaction in seeing the Dolores Project come to fruition. We are a poor area, and your assistance has made possible what we would otherwise have been unable to achieve. People in this area who must work so hard to make a livelihood will not treat lightly this commitment of public monies, and I can assure you that you have our thanks and our trust.

JOINT STATEMENT OF COLORADO STATE SENATOR DAN NOBLE AND COLORADO STATE REPRESENTATIVE BEN NIGHTHORSE CAMPBELL

Mr. Chairman and Members of the Committee:

We, as members of the Colorado General Assembly from Southern Colorado, urge your support for the Animas-La Plata Project and, in particular, for $1.35 million on the FY 1984 Energy and Water Development Supplement Appropriation.

The Colorado legislature spends a considerable proportion of its time attempting to alleviate the problems occasioned by limited water resources in a developing economy. Other than Hawaii, Colorado is the only state that rivers do not run into, however it is common knowledge that Colorado is the location of one of the two major headwaters that give life to the Colorado River. It is time that Colorado, specifically southwestern Colorado, capture its entitlement as specified by the Colorado River Compact of 1922.

The Animas-La Plata Project, among many virtues, will deal with the Indian's reserved water claims which are presently pending judicial solution. Preliminary investigations by various agencies evidence that successful water claims could reduce, and in some cases preclude, non-Indian water use in the various streams and rivers in the San Juan Basin, including a shortfall in the City of Durango's water supply even in water plentiful years. All water rights adjudicated after 1868 (virtually all water in the San Juan Basin) will be subject to severe limitation or extinction. However, the Ute Tribes of Colorado have actively supported the Animas-La Plata Project for many years and have expressed a genuine willingness to accept specified water quantity from the Animas-La Plata Project. We fear, however, that the willingness to negotiate is being eroded with every year that the Animas-La Plata Project fails to receive initial funding. We feel that if the Ute Tribes face no alternative but to litigate their water claims, not only will the present non-Indian water users be adversely affected, but the cooperative atmosphere that has been created over the years between the Ute Tribes and the non-Indian people of southwestern Colorado may be lost forever.

Finally, in 1968 in P.L. 90-537, the Colorado River Basin Project Act was enacted which mandated in part that the Animas-La Plata Project "shall be completed not later than the date of the first delivery of water from said Central Arizona Project . . . ." 43 U.S.C. §620a-1. Obviously this has not occurred, but the concept of the Colorado River Basin projects comprising a total package was to insure the realization of the Congressional purposes of flow and flood control, water storage, and land reclamation. The Animas-La Plata will accomplish these purposes and its viability under Congressional mandate suffers only from adequacy of federal funds. The state of Colorado has indicated it would cost-share in this project, that commitment stands. The Animas-La Plata Project is integral to the successful completion of the Colorado River Storage Project, and your construction funding is urgently needed.

Thank you for your consideration.

STATEMENT OF JOHN MURPHY, CHAIRMAN, ANIMAS-LA PLATA WATER CONSERVANCY DISTRICT

Mr. Chairman and Members of the Committee:

I am John Murphy, Chairman of the Board of Directors of the Animas-La Plata Water Conservancy District, the former Mayor of Durango, Colorado, and for many years a member of its City Council. I should like to add that I am a life-long resident of the area encompassed by the Animas-La Plata Project.

The Animas-La Plata Water Conservancy District, formed pursuant to the Colorado Water Conservancy Act (C.R.S., §37-45-101 et seq.), will be responsible for administering Project facilities within its boundaries and will share in the overall administration of the Project once funding becomes available. The Act itself has survived a succession of legal challenges to its existence within state and federal courts by a small but determinedly contentious faction intent on undermining not only our conservancy district but the other forty-five conservancy districts of Colorado as well. Now that constitutional issues have been put to rest, the District and its constituents, together with the La Plata Water Conservancy District of New Mexico, the Southern Ute Indian Tribe, and the Ute Mountain Ute Indian Tribe, are anxious that the Project move ahead toward its fundamental objective: an adequate, dependable, soundly managed supply of much-needed water for the people and areas that have waited so long for this Project to materialize.

The Animas-La Plata Project, with its projected benefit-cost ratio of 1.6:1, is to provide 41,700 acre-feet of municipal and industrial water to Colorado. Of this amount, Durango and its immediately surrounding communities would receive approximately 6,700 acre-feet. Small wonder, therefore, that the Durango City Council unanimously approved a letter of intent to participate in the Project by contracting with the Animas-La Plata Water Conservancy District for 2,500 acre-feet of water annually.

Additional water storage is needed for Durango's present and future residents and for its thousands of tourists. Durango is the center of a rapidly expanding recreation industry. This area's magnificent scenery and its unmatched climate in summer attract visitors from all over the United States and from many foreign countries; moreover, the nearby Purgatory Ski Resort is no less the focus of tourist attention in winter. Statistics compiled for calendar year 1983, in fact, serve to illuminate how important and extensive recreational activity is in our local economy:

Purgatory Ski Resort	278,000 users
Durango & Silverton Narrow Gauge Railroad (now operating summer and winter)	147,000 passengers
Mesa Verde National Park (nearby)	604,000 visitors
La Plata County Airport	107,471 users

Obviously, with such reliance on an ever-growing tourist industry, our municipal water needs must be addressed prudently and promptly. This is especially true in light of the claims to existing water sources that may become the subject of litigation by the Indian tribes of our region. The Florida River, for example, which is the primary source of Durango's municipal water, is a potential focus of such litigation. Likewise, on the Animas River, where the city's water rights are even more tenuous, the specter of litigation over Indian water rights looms on the near horizon. During periods of extreme shortage - and historically our area has known such periods and their impact - the Southern Ute Indian Tribe and the Ute Mountain Ute Tribe might well become the only major water users of the San Juan River Basin, should the water storage facilities envisaged in the Animas-La Plata Project fail to become an ameliorating reality.

Finally, if I may be permitted to express a personal interest in one particular aspect of the Animas-La Plata Project, let me say that I speak for the dry land farming communities along the La Plata River, collectively called "the Dry Side" in our part of the country because they have frequently been the victims of our erratic summer rainfall, resulting in failed crops of alfalfa, pinto beans, and small grains. The Dry Side farmlands are among the more than 400 small-farm acreages that are prospective beneficiaries of Project water. I grew up on the "Dry Side," and I have experienced the anguish and desperation that become the concomitants of abrupt cessation of available irrigation water during periods of no precipitation. The rich soil, the carefully sown and tended crops, the bright hopes are but dust-ridden reminders of what might have been. The time for action on the Animas-La Plata Project is at hand.

STATEMENT OF R. T. SCOTT, CHAIRMAN, BOARD OF COMMISSIONERS, LA PLATA COUNTY, COLO.

Mr. Chairman and Members of the Committee:

I am R. T. Scott, Chairman of the Board of Commissioners of La Plata County, Colorado. I have been authorized by my Board to give full and unqualified support to the funding of the Animas-La Plata Project. I understand that this funding is not only for presently pending monies in the Senate for $1.35 million in construction funds in a supplemental bill for the FY 1984 Budget, but also for $5,000,000 in new construction funds for the FY 1985 Budget.

I cannot urge you in the Senate enough to follow the wisdom of your colleagues in the House. While the money is more than any of the entities here can raise locally, it certainly represents a wise use of federal tax dollars not only because it will provide jobs and insure a stable economy, but also because in large measure it will be repaid and also provide for the development of scarce energy resources.

As a County Commissioner in Colorado I oversee the land use functions of all lands within the county. I can assure you that growth in La Plata County is a reality. We have presently on the

Board subdivision and project plans which will increase the population of the county by well over 25%. While in some areas they suffer from overdevelopment, in our area many people come here because of the quality of life, to retire or to use this as a second home because of the great recreational opportunities. None of our developers who have done very careful market studies have anything but glowing things to say about this area, and in addition, assure us that growth will continue and will continue at an ever-increasing rate. Because of this population growth there is a critical need for a stable and known supply of water both in the municipal and the outlying areas. While the Animas River itself has never had a call on it, almost every other river in the county has, and particularly, the La Plata River on what is aptly known as the "Dry Side." There has not been a year when there has not been a call on that river. The beauty of the Animas-La Plata Project is that it will take the abundant Animas River water and provide it to the very fertile "Dry Side" soils.

While I do not believe that the best government is that which interferes, I also believe that we must do something to preserve our very viable agricultural economy in this area. This population growth in La Plata County often involves conversion of many of our very fine agricultural lands. This conversion generally occurs because there is not a constant supply of water in order to assure crops will not burn up. It is my understanding that by signing the contract with the Bureau of Reclamation on the Animas-La Plata Project that agricultural land conversion will be slowed down, since this water will be earmarked specifically for irrigation purposes.

Further, the Animas-La Plata Project represents stability of the economic quality of life in La Plata County. Presently many of our children are forced to leave this area and make their way elsewhere in order to find work because there are not enough jobs. The Project itself after completion will supply 180 jobs in both Colorado and New Mexico. The increase in jobs will have a multiplying effect. For example, based on 1979 figures, annual growth of agricultural production would be increased by approximately $18,500,000. If you multiply this times seven, which is the number of times a dollar is deemed to turnover in the community, you could see that the effect on our small area will be vast.

Finally, I would like to point out that this project has been approved for a long time. It has not been built because other projects were funded ahead of it. Now the construction of those projects is nearing completion, and more monies should now be available for those water projects which are a part of the entire Colorado River Basin water resource plan.

I ask you now to respond to the common man, the little guy, the person who works hard for every dollar he has, and who knows exactly where his rent payment must be made. These are the people who make up our county. These are the people who will benefit from the project, and these are the people you can count on to repay every cent of their repayment contracts. I urge your support on their behalf. Thank you.

STATEMENT OF DONALD W. SCHWINDT, MEMBER, DOLORES WATER CONSERVANCY DISTRICT

I am Donald W. Schwindt, a long time resident and farmer of Southwestern Colorado, member of the Dolores Water Conservancy District Board of Directors and President of the Montezuma Valley Irrigation Co., the largest ditch company in our county and a conveyer of Dolores Project water.

After years of uncertain harvest because of sporadic water supply, I experienced indescribable satisfaction on March 19, 1984, when the storage of water began at the McPhee Dam of the Dolores Project. Today I offer my appreciation of your past and present support of the Dolores Project, but what that support means to the people of Southwestern Colorado and their future generations cannot be adequately evaluated. That appreciation will be seen by the transformation of an arid region and relatively unstable rural communities into a thriving agricultural and industrial region and rural communities that not only invite new residents because of our quality of life, but also provide opportunities for employment.

The Dolores Project, however, is only one-half of this transformation formula. Completion of the Animas-La Plata Project, its sister project, is critical to maximize the potential of the Four Corners region of southwestern Colorado and northwest New Mexico. For example, the Animas-La Plata Project will supply water to 12,000 acres of presently fertile but arid land in addition to water for industrial use for the development of coal reserves on both the Ute Mountain Ute and Southern Ute Indian Reservations. The Animas-La Plata Project will put 43,710 acres under full service irrigation and supply 81,000 acre-feet of municipal and industrial water.

Now you may wonder why a Dolores Water Board member would speak on behalf of a project which seemingly does not affect me. I strongly believe that we need both the Animas-La Plata and Dolores Projects to assure economic prosperity in our entire region. I know the hard work my neighbors in the Animas-La Plata District have performed to research, justify and support their project, and I am convinced it is a credible and important aspect of water development in the Colorado River Basin.

Finally, the Indian water rights issues have created great uncertainty for all irrigators and communities in this portion of the state. If the Animas-La Plata Project is not built, it is inevitable that litigation will ensue that may result in drying up what are now fertile enclaves in otherwise arid lands. My neighbors and I have worked too hard to avoid this, and on behalf of the Dolores Water Conservancy District I urge you to allocate construction funding for the Animas-La Plata Project.

STATEMENT OF ART ISGAR, MEMBER, BOARD OF DIRECTORS, LA PLATA WATER CONSERVANCY DISTRICT OF COLORADO

Chairman and Members of the Committee:

I am Art Isgar, member of the Board of Directors of the La Plata Water Conservancy District. I also represent the ranchers and owners of family farms in a section of La Plata County, Colorado, known as Fort Lewis Mesa, where pinto beans, alfalfa, and small grain crops are raised with great success during years when we have adequate rainfall.

It is an honor to be allowed this chance to join fellow Coloradoans in an appeal for money for the Animas-La Plata Project. I share in the opinion that the Project has merit and would be good for Colorado and New Mexico, and in particular for farmers and ranchers of our region. These days you quite often hear the phrase "the plight of the American farmer," for it is the farmer who used to be called "the backbone of American prosperity," but who today finds that his fate and future are beholden to bankers, commodity brokers, price-conscious consumers, and a great number of middle men, all of whom may have good intentions but who nevertheless combine to make farming a precarious enterprise. What I want to tell this subcommittee is that the farmer's plight is bad enough with all these factors and factions to deal with. Yet, for some of us, there is an even more fundamental obstacle to the good life in the farm and ranch business, and that is the problem of scarce water. And really, that is why I am here today to ask for your help.

I've been a farmer and rancher on Fort Lewis Mesa for going on forty years, and I have been a part of that struggling, determined group of farm folks who each year look at and feel the rich, fertile soil, invest in needed equipment, seed, and fertilizer, cultivate and plant, then just pray that drought won't befall us in the middle of the growing season and dry up the irrigation ditches that carry the water that controls our survival. We live on what is locally called "the Dry Side," an area that can enjoy the best of the Lord's bounty when He sends rain in ample amounts, but which, in the absence of plentiful water, makes our investment of time, money, and effort a profitless gamble, an unfulfilled promise.

It is, I am told, in your power to take a major step toward providing the funds needed to cure the plight of the "Dry Side" farmers and ranchers of the La Plata Water Conservancy District. Moreover, in eliminating the plight of these hard-working but often discouraged farmers, you will also help improve the lives of many other people, since the Animas-La Plata Project will send additional water to the Southern Ute Indian Tribe to develop their energy fuel production, it will help the folks downstream in New Mexico by giving them sorely needed agricultural and municipal and industrial water, and it will add a crucially required increase in water for domestic use in the city of Durango.

By ensuring a reliable source of water for our Indian neighbors - the Southern Utes and the Ute Mountain Utes - the Animas-La Plata Project will relieve non-Indian ranchers and farmers of yet another worry; namely, that of dealing with contested water rights. Up to now, the Indian tribes of our area have been patient and generous in negotiations for water from the Florida River and the La Plata River, despite what all of us recognize as their superior claims. Nevertheless, the needs and ultimately the demands of the Indians will certainly be asserted in litigation unless the United States Government moves quickly to demonstrate the worth of its oft-repeated pledges to live up to its obligations.

Finally, I think it would be an oversight not to mention that both the reservoirs planned for the Animas-La Plata Project (the Ridges Basin

Reservoir and the Southern Ute Reservoir) will provide facilities for accommodating the increasing demands for outdoor recreation. Camping, swimming, boating, fishing, and hiking - the relatively inexpensive recreations of those of moderate to middle incomes primarily - will be available not only as attractions to our hundreds of thousands of visitors but also to the people of our own communities. These are the recreational activities that appeal to families, the kinds of things that help keep families together as families, the traditional American means of wholesome enjoyment.

I thank you for the opportunity to bring these ideas and opinions to your attention and I urge you to fund the FY 1984 supplement and the FY 1985 appropriations bill to initiate construction of this worthy project.

STATEMENT OF CLARA MAE SCHMITT, SECRETARY, LA PLATA WATER CONSERVANCY DISTRICT

Chairman and Members of the Committee:

I am Clara Mae Schmitt, Secretary, La Plata Water Conservancy District, and for the past thirty years a rancher near Hesperus, Colorado, where my husband and I have about two hundred head of cattle and we farm a few hundred acres. I have served on the La Plata County Planning Commission for four years, and my husband and I are active members of the La Plata County Farm Bureau. These facts are pertinent, I think, by way of explaining the sense of urgency I attach to gaining approval of the Animas-La Plata Project.

Since 1968, when the Project was first authorized for study, my family and I have shared in the high hopes and expectations of our agricultural community, encouraged by the prospect that the frustrating uncertainty which so often casts its shadow on our ranching operations would be removed. At its meetings with civic-minded residents of our area, the La Plata County Planning Commission has been gratified to find how strong the public support is for the Project. For too long, our farmers and ranchers say, we have been confronted on the one hand by capricious Nature, with its seemingly whimsical allowance of rainfall during our growing season, and on the other hand by an equally unpredictable governmental body - not limited to either political party, incidentally - which says that it understands our problem but which lacks the will to approve the funds to solve it. Yes, we have on numerous occasions been told that Congress was interested in the farmers, that the Congress would assist in putting to beneficial use the waters of the Colorado River that are wasted in spring runoffs when they could and should be stored in reservoirs, and that our representatives in Congress recognize that water reclamation projects characteristically support themselves through their repayment contracts with their beneficiaries, returning to the Government each dollar it has invested. Still, we seem to contend with the same obstacles: scarce water and sparse dollars.

I join in the appeal made by so many others this day for your approval of the funds for a vitally important undertaking, the Animas-La Plata Project.

STATEMENT OF BRICE LEE, SECRETARY, SOUTH DURANGO WATER DISTRICT

Chairman and Members of the Committee:

I am Brice Lee, Board Member and Secretary of the South Durango Water District. The District owns 1.333 cubic feet per second of water in the Animas River. In 1965, when the District was formed, this water right was more than adequate to serve the needs of the District users. The District, however, is one of the fastest growing areas of La Plata County. The County itself experienced a population growth of 25% between 1970 and 1980, with projections that the population will double over the next two decades.

Obviously, there is great pressure on a limited resource, since no development is permitted in La Plata County without an assured water resource. Therefore, the limit on our water supply will necessarily delineate the boundaries for both residential and commercial development. The District sells water not only to residential users, but also to the major industrial park and growing commercial area of La Plata County. This area will experience a substantial growth within the next year with the addition of the La Plata County Justice Facility and the resultant professional offices and support services that will be built. Ultimately, this increase in users, along with the projected growth of La Plata County will completely consume the District's water right. For this reason the District has requested and has voted to sign a letter of intent to purchase 2,000 acre-feet from the Ridge's Basin Reservoir, the main reservoir of the Animas-La Plata Project. Without this additional water allocation it is impossible to accommodate or even plan for the inevitable population increase in our district.

The Animas-La Plata Project represents the only water source which will meet the demonstrated needs of our District. We feel the Project is environmentally sound and economically feasible. The balance of application of project waters between irrigation and municipal and industrial use is very equitable for all citizens of the county, and will enhance all areas of the Four-Corners region's economy.

While I have only addressed the problems within our District, I am also past president of the La Plata County Cattleman's Association, and I can assure you the Animas-La Plata Project will also serve our agricultural community very well.

Thank you for your assistance.

STATEMENT OF ANN W. BROWN, MEMBER, DURANGO (COLO.) CITY COUNCIL

Mr. Chairman and Members of the Committee:

I am Ann W. Brown, member of the Durango City Council and a resident of Durango, Colorado, for the past twenty-five years. In fact, my family has lived in neighboring Montezuma County, Colorado, for five generations. Although I have been a school teacher, administrator, and social services coordinator, it is primarily in regard to my childhood as a member of a farming family that I have felt compelled to assert my interest in the Animas-La Plata Project and to seek your strong support of our request for the funds needed to make the Project a reality.

I recall so well that as a child living on a ranch near Cortez, Colorado, there were many occasions when I joined my sisters and rode into town to fill containers of water to take back with us for the family to use and to give to the livestock. In those difficult days of summertime, when the cistern was empty and the irrigation ditches had run dry, going all the way to town several times a day and hauling a stock tank and milk cans filled with water back to our home helped us and our animals to survive. Sporadic rainfall and drought even today pose threats to the existence of the farms and ranches of the part of southwestern Colorado I represent. But this condition does not have to be, for we know the means of storing and regulating the flow of water that can ensure a stable quality of life. The means I am speaking of is the Animas-La Plata Project.

In seeking $1,350,000 through the Energy and Water Development Supplemental Appropriations Bill for initial construction and inclusion of $5,000,000 in the Fiscal Year 1985 budget for second year construction, I also have the obligation as a City Council member to point out that 2,500 acre-feet of Project water will be allocated to Durango for municipal and industrial use. Since I have been on the City Council, we have tried through various measures to conserve water during periods of summer shortage, including installation of water meters and limiting hours and days of water usage outside the home. Nevertheless, with our present water storage capacity and our uncertain summer precipitation, we cannot supply the needs of our existing population, much less meet the obligations that attend future growth of our community, without the additional water represented by the Animas-La Plata Project. The City Council, with an eye to taxpayer concern for cost effectiveness, employed an outside firm of consultants to evaluate our proposed participation in the Project, and the consulting engineers (Black and Veatch, of Denver, Colorado) concluded that, from the standpoint of a constant, dependably adequate supply of water for the region, the Animas-La Plata Project was the most economically feasible alternative. The City Council, therefore, affirmed the conclusion of the consulting engineers, and since its review of that report, has strongly endorsed the Animas-La Plata Project.

Also today, I wish to echo the message being conveyed by others in regard to the water rights of the two Indian tribes near us, the Southern Utes and the Ute Mountain Utes. Years ago these Indian tribes were required to accept as the sites of their reservations extensive tracts of land which then seemed to have but little economic worth: some 13,000 acres of semi-arid, marginal terrain. Only in relatively recent times have we learned that the Southern Ute Indian Tribe's reservation has between 116,000,000 and 400,000,000 tons of coal reserves, and that the Ute Mountain Utes tribal reservation contains an estimated 39,000,000 tons of readily obtainable coal. The Indians are depending on the Animas-La Plata Project to provide them with a total of 32,500 acre-feet of water annually for municipal and industrial use (26,500 acre-feet for the Southern Ute Indian Tribe and 6,000 acre-feet for the Ute Mountain Ute Indian Tribe) so that these coal reserves can be converted into productive forms of energy.

According to the Project plan, these tribes will also be entitled to 29,900 acre-feet of water for irrigation (3,300 acre-feet for the Southern Ute Indian Tribe and 26,600 acre-feet - including 25,800 in Colorado and 800 in New Mexico - for the Ute Mountain Ute Indian Tribe). Having worked for the Southern Ute Indian Tribe for six years, in their Early Childhood Education and their Community Action programs, and having been a consultant to the Ute Mountain Ute Tribe, I am aware of how vitally important Project water will be to them. In giving life to tribal economy, the Animas-La Plata Project will also offer new hope to the many unemployed tribal members who view with eager readiness the opportunity to engage in productive enterprise. Should the two tribes lose faith in the promises made by the United States Government to supply adequate water to the reservations - promises dating back to 1968 - they will have little alternative than to take their cause to the courts to establish their water rights.

STATEMENT OF BILL PRICE, MEMBER, LA PLATA WATER CONSERVANCY DISTRICT

Chairman and Members of the Committee:

I am Bill Price, longtime resident of La Plata County, and Board member of the La Plata Water Conservancy District. In addition to my work as principal of the Fort Lewis Mesa Elementary School, I own and run a small cattle ranch in the Marvel/Red Mesa area of southwestern Colorado in the La Plata River Canyon. I am here today to urge your support for the Animas-La Plata Project and, more specifically, $1.35 million in supplemental money for FY 1984 and $5 million for FY 1985 to initiate construction of this project.

On the La Plata River there is an urgent need for additional water supplies for irrigation in July, August, and September because the snowmelt has peaked and ended by early July, and after that point the La Plata River bed is dry except for rainfall and attendant drainage. Without the Animas-La Plata Project reservoir storage to regulate the streamflow pattern in accordance with seasonal irrigation requirements, the spring excess is not usable later in the summer. Additionally, the Animas River has never been required to shut off junior appropriators. The Animas-La Plata Project will apply this abundant water source from the Animas River to assist those now dependant on the sporadic flow of the La Plata River.

Although agriculture is the oldest continuing industry in the area, the lack of a regulated irrigation supply has significantly limited the production of crops. Crop yields have been low, the diversity of crops has been restricted, and crop failures have occurred.

My ranch, as well as other ranches, farms, and numerous acres owned by the Ute Mountain Ute and Southern Ute Indian Tribes, will benefit greatly from the Animas-La Plata Project. The Project's benefits are not, however, limited to the present generation. Two of my five children have a strong desire to farm and ranch. I can only encourage them to become educated and trained in a field that will support them, their families and a ranch, for as conditions exist today in southwestern Colorado the traditional rancher whose entire life is dedicated to his ranch is undergoing drastic change and may indeed disappear in our lifetime.

Even if my children and the many others that I have seen progress through Fort Lewis Mesa Elementary School are able to obtain the education and training for an occupation that can supplement their dreams of ranching, the economy of southwestern Colorado offers little employment opportunities. Instead, careers lie in the large urban areas, far away from fertile and available ground. The Animas-La Plata Project will breathe life into our entire economy making southwestern Colorado a viable place to live and work.

STATEMENT OF RICHARD M. DOSSEY, MEMBER, ANIMAS-LA PLATA WATER CONSERVANCY DISTRICT

Mr. Chairman and Members of the Committee:

I am Richard M. Dossey, owner of a farm on the west side of La Plata County and a member of the Animas-La Plata Water Conservancy District Board of Directors since the District was formed.

For more than thirty-five years I have been one of the "Dry Side" farmers, those who live on land to the west of the La Plata River and who do the best we can every year to grow enough pinto beans, wheat, and alfalfa to provide a living for our families. Our big problem is that we can't depend on getting enough rain every year to keep the crops growing. Things generally look fine in the spring. The soil is ready for planting; we put out the seed; we watch things start to grow; then we have to wait and see if our gamble on the weather is worth it. Because we don't have a reliable source of water, we find that about three or four years out of every ten we wind up with what we call a "short crop," which is about enough at harvest time to keep us going but not enough to make farming worth the effort. Also, even the "short crop" can turn out to be a total failure.

The Animas-La Plata Project is our best hope to make the Dry Side the kind of farmland that we need in our part of the country. Please give us the funds to get the Project constructed.

PREPARED STATEMENTS FROM SENATORS ARMSTRONG AND HART OF COLORADO

Senator DOMENICI. And before you proceed, I want to make part of the record statements from both Senator Armstrong and Senator Hart which cover items of particular interest to them.

[The statements follow:]

STATEMENT OF SENATOR ARMSTRONG

MR. CHAIRMAN, I am grateful to you and the members of the Subcommittee on Energy and Water Development for this opportunity to speak on the Administration's water resource budget for Fiscal 1985.

As you know, the President's budget for the 1985 fiscal year requests approximately $1.08 billion for overall Bureau of Reclamation planning, development and project operation in the 17 Wester states. That represents an increase of $114 million over the amounts appropriate for the 1984 fiscal year.

For fiscal 1985 in Colorado, the President requested a total of $161.6 million for Bureau water project construction, planning and operations. That budget request represents an increase of $23.8 million over the $137.8 million appropriated for the 1984 fiscal year. In addition the President's 1985 budget contains a request of $5.6 million for water related spending by the U.S. Army Corps of Engineers in Colorado. However, absent in all this is a new construction start for two Bureau of Reclamation projects in Colorado which have been ready for two decades.

As you know, last year the House acted on H.R. 3958, the Water Resources Development Appropriation Bill. That bill contained funding for the Animas La Plata and the Narrows Projects. The Senate Appropriation Committee made some changes in the House passed bill and the version reported from the full committee contained funding only for Animas La Plata.

During your committee consideration last year, I told the chairman that I support both projects and am eager to see some progress after many years of delay. Even though the Committee decided to move forward with only one Colorado project, this was at least movement in the right direction.

H.R. 3958 is now pending on the Senate calendar and presumably could be called up for consideration. If that does not happen, then I urge the Committee to include at the minimum the Colorado portion in the FY 1985 regular appropriation bill.

I don't think I need to restate the case for Western reclamation projects to this committee. These projects are good investments. Public funds appropriated for reclamation projects are returned both in terms of specific repayment contracts and the increased economic activity generated by agricultural production and other benefits of these projects.

If the economic argument for these projects is sound, and I believe it is, then the only real question is whether we can or should fund these projects at this time, particularly when we are trying to deal with the more important priority of federal deficits. On this point there is a strong equity argument in favor of funding a Colorado project without delay.

The seven states of the Colorado River Basin, divided into the four states of the Upper Basin and the three states of the Lower Basin have cooperated over the last several decades on the basis of compromises forged after many, many years of struggle. An essential element of that compromise was to have Upper and Lower Basin water projects move forward in tandem... providing both Upper and Lower Basin states with the capability to store and use precious water resources.

However, Upper and Lower Basin projects are not now moving forward in tandem. Over the last ten years, Bureau of Reclamation funding was divided 62.5% for projects in the Lower Basin states and 37.5% for projects in the Upper Basin states. Clearly, the basic compromise is being stretched to the breaking point. That is why I think it is very important to act without further delay.

I know the Colorado water users, the other members of our congressional delegation, and state and local officials are more than willing to work with the committee to sort out the details on the minimum we need to get going in the coming fiscal year.

I would also like to briefly mention issue of flood control work on Westerly Creek, located in southeast Denver and passing through Lowry Air Force Base. In essence, a complete flood control program is tied to work that must be done on Lowry Air Force Base. This is obviously a clear federal responsibility, and work planned by the Metropolitan District is being held up until progress is made on the Air Base. To speed up the process, the District has asked that the Committee allocate at least $200,000 to the Army Corps to initiate construction planning and engineering for the Westerly Creek Project. I support that request and look forward to working with the Committee to resolve this matter.

STATEMENT OF SENATOR HART

Mr. Chairman, thank you for the opportunity to submit testimony today on behalf of water development and flood control projects in the State of Colorado.

I urge the Committee pay particular attention to the statements presented today by various Coloradans. Mr. Bill McDonald, Director of the Colorado Water Conservation Board, testifying on behalf of the Governor and State of Colorado accurately describes the situation and needs in Colorado with respect to the FY85 Energy and Water Development Appropriations bill.

Like most Coloradans, my reaction to the President's recommended FY85 budget for the Bureau of Reclamation and Army Corps of Engineers is mixed. While I urge the Committee to, at a minimum, maintain recommended funding levels for these agencies, I believe it important for the Committee to seriously conisder additional FY85 funding for three other long awaited projects in Colorado -- the Narrows, Animas-La Plata and Westerly Creek Projects.

Other witnesses today will testify on the specific funding level requested. I support their requests and would like to underscore the importance of each of these projects to the State of Colorado.

The Narrows Unit was originally authorized by Congress as part of the Pick-Sloan Missouri Basin Project in 1944. In 1970, Congress reaffirmed its support for Narrows and reauthorized the project. Unfortunately, since 1977, there has been no progress at the site.

The Narrows Project resulted from agreement among affected states and interests on the Federal role in developing water storage in the Missouri Basin. When complete, Narrows will provide supplemental irrigation water for Colorado's fertile South Platte Valley, needed flood protection for downstream communities in Colorado and Nebraska and recreational opportunities for all Coloradans. This area of our state continues to experience great needs for agricultural water and increasing demand for municipal and industrial water supply. In addition, water users in Nebraska are increasingly interested in developing South Platte River flows to satisfy needs in Nebraska, pointing to a growing need for Colorado to store water to which it is legally entitled.

Similarly, the Animas-La Plata Project, authorized in 1968 as part of the Colorado River Basin Project Act and Colorado River Storage Project Act, promises substantial benefits to inhabitants of both Colorado and New Mexico. This multi-purpose water storage project will provide municipal and industrial water to local communities and irrigation water for farmers in the La Plata Basin.

Perhaps most important, this project will address serious social and economic problems relating to the establishment of Indian water rights for the Ute Mountain Ute, Southern Ute and Navaho Indian Tribes. By proceeding with this project, the United States government has the unique opportunity to rectify social and economic injustices which it has helped create by waiting over a century after the Ute Reservations were established before making any attempt to quantify the water rights to which the Tribes are legally entitled. To my knowledge there are no viable alternatives to this project if Indian water rights are to be honored and severe economic dislocations among non-Indian communities to be avoided.

Fulfilling these Indian reserved water rights is a national obligation which should be dealt with by the Federal government. By moving ahead with this necessary and long awaited project, we have a unique opportunity to clarify and quantify Indian water rights and set a national precedent which is in everyone's best interest.

In addition to these two critical projects, I believe it important for the Committee to note other existing and planned Bureau projects in Colorado. Four additional projects are authorized and planned in Colorado. Due to fiscal and other constraints, none of these projects have received the attention nor serious consideration by Congress which each merits. I would point out to the Committee that Colorado remains very interested and supportive of these projects.

I am pleased the Bureau's FY85 budget includes funding for ongoing construction of the Dallas Creek, Dolores and Closed Basin Projects. Each will provide Colorado an opportunity to fulfill its various compact and Treaty obligations as a participating Colorado River Basin state. Similarly, recommended funding for the Colorado River Quality Improvement Program will enable the seven Colorado River Basin states to continue efforts to address and reduce salinity concentration in the Colorado River.

Finally, I would like to briefly address recommended funding for the Army Corps of Engineers flood control projects in Colorado. I am deeply concerned about the lack of funding in the President's budget for urgently needed flood control in the Denver Metropolitan Area. The proposed Westerly Creek Flood Control Project has long been considered a joint project involving the Corps and the Urban Drainage and Flood Control District. The project is strongly supported by all affected interests, including the Cities of Denver and Aurora and the State of Colorado.

The project consists of flood control work both upstream and downstream of the Lowry Air Force Base. Local interests have been proceeding with work on both the upstream and downstream portions of the project and have already spent or committed upwards of $7 million. Meanwhile, planning and folld protection work on the Air Force Base has long been considered the responsibility of the Corps of Engineers. Unfortunately, the Corps' efforts on Westerly Creek have reached an impasse during the past three years while attempts were made to promote greater local cost sharing and up-front financing than that required under existing law.

Two years ago, in an effort to avoid further delays, the House Appropriations Committee included $200,000 in its appropriation bill. Unfortunately, this funding did not survive the Congressional appropriations process and planning and engineering work at Lowry Air Force Base has been delayed further.

Simply put, the Corps proposed improvements at the Air Base are an integral and vital link in the total system of drainage and flood control work. I urge the Committee to appropriate sums necessary to continue engineering planning for the Westerly Creek Project in order to avoid additional costly and unnecessary delays and provide badly needed flood control and drainage in the Denver Metropolitan area.

Mr. Chairman, nearly six years have passed since any measurable progress has been recorded on needed multi-purpose water projects in Colorado, particularly the so-called "new starts." I believe 1985 and the appropriations bill before us today presents an opportunity to reaffirm our commitment to several long authorized and awaited water projects in Colorado. While burgeoning deficits and other pressing national issues force us to reevaluate the traditional Federal role in water project development, it is nonetheless important Congress stand behind those projects it has previously considered and deemed worthy of Federal participation. The Narrows, Animas-La Plata and Westerly Creek Project in Colorado merit special attention during consideration of the FY85 Energy and Water Development Appropriations bill before the Committee.

Mr. Chairman, I look forward to working together in coming weeks and thank you for the opportunity to submit testimony today.

INTRODUCTION OF SUPPORTING WITNESSES

Mr. McDONALD. My name is Bill McDonald and I am appearing on behalf of Governor Lamm of Colorado as well as the agencies responsible for the protection and conservation of our water resources. My testimony has been submitted for the record.

With me today, Mr. Chairman, are members of the tribal councils of the Ute Indian Tribe and representatives of the water conservancy and water districts who are supporters of the Animas-La Plata project. Also with me are members of the board of directors of Lower South Platte District, who will be speaking to the Narrows project and also likely to testify subsequently.

Finally, a third gentleman, John Porter, representing the Dolores Water Conservancy District.

FUNDING REQUEST

Mr. McDONALD. Thank you very much.

The State of Colorado supports the items included in the President's budget, in particular the funding for the projects currently under construction by the Bureau of Reclamation in Colorado; second, the Department of Interior's Colorado River basin salinity control program; and, third, the Corps of Engineers flood control projects and planning programs in Colorado. We take exception to the President's budget in three regards, and I would like to speak to those.

ANIMAS-LA PLATA PROJECT, COLORADO AND NEW MEXICO

First, the Animas-La Plata project, which is an authorized participating project with the Colorado River storage project, a joint Colorado-New Mexico project, as you well know, designed among other things to speak to the problems of Indian water supports in parts of Colorado and New Mexico. The Animas-La Plata project holds the potential of assisting in the resolution of the claims of the Ute Mountain Ute and Southern Ute Indian Tribes. Those claims have been filed, but we believe all parties understand that expensive and protracted litigation would not be in anyone's interest.

The fulfillment of those Indian reserved water rights is, in Colorado's opinion, a national obligation which should be dealt with by the Federal Government. The Animas-La Plata project is a means to resolve at least a portion of the tribe's claims amicably, and we believe the tribes are very strong supporters of that project, are aware of that potential and constructive negotiated solution.

Planning and construction activities for the project have been completed and this committee has reported a bill which includes $1 million for fiscal year 1984. In light of that Senate action, we would respectfully request that $5 million be appropriated for fiscal year 1985 to continue with the second year of construction of the Animas-La Plata project.

NARROWS PROJECT, COLORADO

The second item with which we take exception in the President's budget, Mr. Chairman, is the lack of appropriation for the Narrows project, a project which is authorized as a part of the Pick-Sloan Missouri River basin developlment plan. The Narrows project would be the largest water body in close proximity to the Greater Denver Metropolitan Area. It would yield numerous recreational benefits to the growing communities along Colorado's front range. The Narrows would be about 70 miles and provide recreational resources to well over 1 million people in the greater metropolitan area.

In the last 2 years, the Bureau has updated planning for the project with the assistance of appropriations from the House and the Senate Appropriations Committees and we are again ready to proceed with construction of the project. The House has passed a measure which includes construction funding for the Narrows in fiscal year 1984. Regrettably, this committee when it passed out that bill in the Senate did not include funding.

We would urge now, Mr. Chairman, that appropriations be included in the amount of $5 million for construction on the Narrows in fiscal year 1985.

As you well know, it has been some time since appropriations were made for initiation of construction water projects. We thank this committee for its leadership in reporting out a bill last fall that has gone a long way to resolve the hiatus of the last several years. That bill did not impose on the Animas-La Plata project, in the House version, any requirement for up-front Federal financing.

This is, we believe, as it should be. If President Reagan's January letter to Senator Laxalt seems to revive doubts on the issue, the point I would like to make with the committee, more than all, is Colorado stands ready to consider financial participation in Federal projects. A political subdivision of the State has been authorized to consider such financing. We await final congressional direction on how to proceed and simply find ourselves in a position of not really knowing which direction it is desired that we go.

WESTERLY CREEK, COLO.

Finally, Mr. Chairman, very briefly, the Westerly Creek flood control project in the cities of Denver and Aurora is a very important flood control project for Colorado. There is an Air Force base in the middle of the stream that is under consideration. The local people have done everything they can do below the Air Force base. Until the Federal Government proceeds with the flood control project on the Air Force base, we are not in position to finish the upstream work. We, therefore, respectfully request that $200,000 be added to the budget to continue advanced planning on the Westerly Creek project.

Mr. Chairman, that concludes my remarks unless you have questions.

Senator DOMENICI. We are going to ask a couple of questions about Animas and the Narrows, but first you have additional witnesses.

Mr. McDONALD. That is correct.

Senator DOMENICI. Let me ask you, how much is needed in the appropriation bill for Animas-La Plata; is that $5 million?

Mr. McDONALD. $1.35 is in the bill which this committee passed out last year. We are acting under the assumption at this point that bill will proceed and the second year will be forthcoming and we request $5 million in the context of that second year.

Senator DOMENICI. That $1,350,000 is found in the so-called water resources appropriation bill, H.R. 3958, is that correct?

Mr. McDONALD. That is correct, yes.

Senator DOMENICI. The House has both the Narrows and Animas, the Senate only has Animas.

Mr. McDONALD. This committee only reported out only the Animas-LaPlata.

Senator DOMENICI. On the other hand, it is marginal whether either bill will become law or whether the funding will go in the normal appropriations. If it doesn't, are you suggesting we need to accumlate the two, we need to get the 1984 money in some way?

Mr. McDONALD. Yes, sir.

Senator DOMENICI. Is that correct?

Mr. McDONALD. That's correct.

Senator DOMENICI. I think we will proceed to the other witnesses. You will be here for a while, won't you?

Mr. McDONALD. I will, Mr. Chairman.

Senator DOMENICI. It will only take us 15 minutes; maybe we need you, maybe we don't. Let's proceed. Thank you very much.

ANIMAS-LA PLATA PROJECT, COLORADO AND NEW MEXICO

STATEMENT OF FREDERICK V. KROEGER, MEMBER, COLORADO WATER CONSERVATION BOARD

ACCOMPANIED BY:

LEONARD C. BURCH, CHAIRMAN, SOUTHERN UTE INDIAN TRIBE
ERNEST HOUSE, CHAIRMAN, UTE MOUNTAIN INDIAN TRIBE
JIM T. DUNLAP, CHAIRMAN, BOARD OF COMMISSIONERS, SAN JUAN COUNTY, N. MEX.
QUINCY CORNELIUS
JOHN PORTER

Senator DOMENICI. Next is Mr. Sam Maynes, general counsel, Southwest Water Conservation District, who will testify regarding the Animas-La Plata project. We also have the county commission chairman from the State of New Mexico, Mr. Jim Dunlap, accompanied by one of the active residents in that area on the New Mexico side, Mr. Quincy Cornelius. They are here.

Would you mind taking the witness table also and we will have a couple of remarks from you as soon as we are finished? We will proceed.

Go ahead, Mr. Maynes

INTRODUCTION OF SUPPORTING WITNESSES

Mr. KROEGER. Thank you, I am Fred Kroeger. We have with us today people in addition to these at the head table. We have additional people from both the Southern Ute and Ute Mountain Ute Tribes. We have Ann Brown from the city council of the city of Durango; R. T. Scott, chairman, La Plata County commissioners. We have agricultural interests in both La Plata, Montezuma, and Dolores Counties, and we have a member of the domestic water system, John Porter, here with the Dolores people.

I am chairman of the Southerwestern Water Conservation Board and we are here in behalf of both the Dolores and the Animas-La Plata. John will speak a bit about that.

Our statements have been submitted and I wish to be very brief.

Senator DOMENICI. You didn't introduce, at least I didn't catch the introduction of the people actually sitting with you.

Mr. KROEGER. In addition, we have the New Mexico people, county commission chairman from San Juan County, N. Mex., John Dunlap, and Quincy Cornelius who is the water specialist for San Juan Valley. I apologize we did not include them.

Senator DOMENICI. Who are these other people?

Mr. KROEGER. Leonard Burch, tribal chairman of the Southern Ute Tribe; Ernie House, tribal chairman of the Ute Tribe. On my left is John Porter, manager of the Dolores Water Convervancy District.

Senator DOMENICI. Let's proceed now. We don't have a lot of time, but we want to hear your brief statements so if you will proceed first.

Mr. KROEGER. Our statements have been submitted, Mr. Chairman, and we do wish to be very brief. The Animas-La Plata project has been authorized many years ago and it is one of those projects, I think, that solves more problems for more interests than any project I have been involved with. It serves two States, Colorado and New Mexico. It provides water for three Indian tribes. It provides water for 5 cities in New Mexico and Colorado and for 15 rural domestic systems in the two States.

It also has two reservoirs for recreational interests in that Southwest area.

The project has a benefit-cost ratio of 1.6 to 1. It's a worthy project and I think the most commendable thing that might be said about the Animas-La Plata is for all these many years we have worked hand in hand with the two Colorado Indian tribes and have agreed on how we would utilize the waters of that San Juan basin to solve serious Indian water rights claims.

I think this can be a model on how Indian claims might be settled elsewhere. They have been very cooperative and yet we have been before Congress on many different occasions and have not received funding for this project. This is my 23rd time to come before this group and I guess I have lived in hope and my question this morning is: What are we saying wrong; what are we not doing right that causes this project not to be funded and started?

Senator DOMENICI. I will give you my version. I don't think you are doing anything wrong. I think had it not been delayed about 3 or 4 years ago it might be going. Now we catch ourselves in the fiscal crunch when water projects of this size are very difficult to fund. But I also think there is great support in Congress to start the Animas-La Plata. I wouldn't be pessimistic at all if I were you, just because it is not in the President's budget.

I think there is great support. It started on another major water project in the West and it looks like it is next in line. Your patience may very well be paid off.

Mr. KROEGER. We certainly appreciate your concern.

Senator DOMENICI. We are going to hear from two Governors. Did you care to say something to the committee?

STATEMENT OF LEONARD BURCH, CHAIRMAN, SOUTHERN UTE INDIANS

Mr. BURCH. I am Leonard Burch, chairman of the Southern Ute Tribe. I have with me today vice chairman of the Southern Ute Tribe, Chris Baker.

Senator DOMENICI. Welcome, Mr. Vice Chairman.

Mr. BURCH. We have been, as Mr. Kroeger stated, coming back before this body and the Congress since the authorization of the Animas-La Plata project in 1968.

I also would like to know what are we doing and all of that. I hope and I pray that perhaps this might be the time that we get support and we have had support over the years. My people in southwest Colorado, working with our non-Indian friends, have planned and worked together to get the project funded and started.

So, Mr. Chairman, I bring greetings from the tribal council so that perhaps the lands that we have on the reservation can be irrigated and some of the waters that we see going through our reservation can be stored and put to use for the benefit of our people. And not only our people, but the people in the southwest part of the State. So, Mr. Chairman, without taking too much time, I will give this to Chairman House.

Senator DOMENICI. Chairman House.

STATEMENT OF ERNEST HOUSE, CHAIRMAN, UTE MOUNTAIN UTE INDIANS

Mr. HOUSE. Mr. Chairman, I am Ernest House, chairman of the Ute Mountain Ute Tribe.

I am here today on behalf of the tribe to express my gratitude to this committee for the past support of the Deolores project and to urge the continued support for the Dolores project to finalize the request for endorsement of the water appropriations bill for fiscal year 1984 that will provide $1,350,000 for initial construction of the Animas-La Plata project. I strongly urge the committee's approval of allocation of $5 million in the fiscal year 1985 budget so the second year of construction of the Animas-La Plata project can advance to the final planning stages. Thank you very much.

Senator DOMENICI. Thank you very much.

[The statement follows:]

STATEMENT OF ERNEST HOUSE, CHAIRMAN, UTE MOUNTAIN UTE TRIBE

Mr. Chairman and members of the committee, I am Ernest House, chairman of the Ute Mountain Ute Tribe. I am here today on behalf of the tribe to express our gratitude to this committee for past support of the Dolores project, to urge its continued support for the Dolores project, to firmly request your endorsement of the Energy and Water Development supplemental appropriations bill, fiscal year 1984, that will provide $1,350,000 for initial construction for the Animas-La Plata project, and strongly urge the committee's approval of the allocations of $5 million and the fiscal year 1985 budget, so that the second year construction of the Animas-La Plata project can advance through the final planning stages and beyond.

The Ute Mountain Ute Tribe is centered in Towaoc, Colo. The reservation is located in an extremely arid region of southwest Colorado. The lack of water for municipal use has required us to truck domestic water to our headquarters at Towaoc. Though our lands are fertile, the lack of sufficient water for irrigation of our lands has often made the effort of our farmers meaningless.

In anticipation of water delivery from the Dolores project in 1990, the tribe is currently spending over $600,000 for improvements to its' domestic water system. The tribe is also undertaking two irrigation demonstration projects at a cost of $279,000 to determine the most effective needs of irrigating its farmlands.

In addition to these projects, the tribe is entering into a cooperative agreement with the Dolores Soil Conservation District for technical and managerial assistance in improving the use of tribal farmlands. We are also working with the Montezuma Valley Irrigation District regarding improvement of salinity seepage. We have formed the Ute Mountain Ute Tribe Water Resources Planning Task Force to make recommendations to the tribe regarding the best use of our water.

The Dolores project, with great assistance, will provide part of the irrigation, municipal, and industrial water for our tribe to be economically independent. The Animas-La Plata project, like the Dolores project, was authorized by the Colorado River Basin Act of 1968 as a participating project under the Colorado River Storage Act of 1956. Yet, the construction of the Animas-La Plata project has not begun, while other projects reach completion.

As we have demonstrated with the Dolores project, we are willing to work with non-Indian neighbors to secure all of our rights through the U.S. Congressional Act. However, years have gone by without the funding of the Animas-La Plata project. We feel strongly that unless this committee appropriates the needed sum to the Animas-La Plata project, we have no other alternative to pursue our rightful water claims through litigation instead of negotiation.

STATEMENT OF JAMES T. DUNLAP, CHAIRMAN, BOARD OF COMMISSIONERS, SAN JUAN COUNTY, N. MEX.

The statement of Jim Dunlap, chairman, board of county commissioners, San Juan County, N. Mex., will be made a part of the record, and we will ask you if you would briefly address the issue, please.

[The statement follows:]

STATEMENT OF JAMES T. DUNLAP

Mr. Chairman and members of the committee, I am Jim T. Dunlap, chairman of the board of commissioners of San Juan County, N. Mex., speaking on behalf of all the commissioners and their constituents, and urging your favorable consideration of the Animas-La Plata project and the request for funding to move the project forward.

Having served as chairman of our board of commissioners for several years, and having been active in the agricultural and business communities of San Juan County, N. Mex., for more than two decades, I am aware of the crucial importance of water to our regional economy. As manager of the Lower Valley Rural Water Users Association, which supplies water to more than 1,500 families west of Farmington. and as the past vice president of the National Rural Water Users Association, I have been witness to the economic peril that attends an unstable, unpredictable supply of water for irrigation, industrial, and domestic use.

The Animas-La Plata project offers to our area the most promising prospect of a consistently adequate water supply, one capable of providing a base for the development of our natural resources so vital to the recovery of our economy in northwestern New Mexico and the southwestern area of Colorado. Waters from the La Plata River and the Animas River in Colorado will be shared by our two States for mutual benefit, enabling such cities as Farmington, Aztec, and Bloomfield, N. Mex., to satisfy their municipal and industrial demands, along with meeting the needs of 11 rural water systems within our county, while ensuring the contiguous agricultural lands of approximately 16,800 additional acre-feet of water for irrigation, thus bringing a healthful balance to the economy of this part of the country.

Through this highly beneficial project, the almost semiarid, lamentably underdeveloped landscape of San Juan County can be transformed within a few short years into a progressively green and flourishing cropland and pastureland. It is important to note that without this project, we will be forced to decrease the agricultural water in our area in order to supply water necessary for industrial and municipal uses.

One especially gratifying aspect of the Animas-La Plata project is the cooperative effort of the two adjoining States—Colorado and New Mexico—to bring about in amicable fashion an equitable enhancement of a natural resource that is vital to the wellbeing, if not the very survival, of both. The total project water supply—all emanating from the two Colorado Rivers involved—is expected to average 198,200 acre-feet annually, of which 55,200 acre-feet are programmed for New Mexico, with proportionate sharing of costs.

Additionally, the Animas-La Plata project provides the best assurance of fulfilling the water rights of both the Southern Ute and the Ute Mountain Tribes and providing a much needed supply to the Navajo community of Shiprock in northwestern New Mexico. The Animas-La Plata project can and will serve to protect the legitimate interests and aspirations of all concerned, while at the same time perpetuating the harmony we have so carefully fostered over the past several decades.

Because the Central Arizona Project is nearing completion, I need to bring to your attention a part of Public Law 90-537 which specifically directed the Secretary of Interior to "proceed as nearly as practicable with the construction of the Animas-La Plata project and other participating Federal reclamation projects concurrently with the construction of the Central Arizona Project, to the end that such projects shall be completed not later than the date of the first delivery of water from the said Central Arizona Project."

Our future economic development is dependent upon the availability of water furnished by the Animas-La Plata project. The burgeoning population due to development of coal, oil, and gas resources, as well as increased agricultural uses, requires that we have additional water supplies by 1990.

I earnestly request your support for the project. It has been a pleasure to appear here and present this statement to the committee.

Mr. DUNLAP. Mr. Chairman, thank you greatly.

I represent those citizens of San Juan County, the city of Farmington, and Aztec with 11 rural water systems in that county who have an interest in the Animas-La Plata project. I want to say, there is a chance to complete this project or begin to work on this project toward the end of completion.

It is necessary; it is vital to our area. We in San Juan County support it strongly, and we appreciate any endeavors this committee can do to carry it out.

Thank you.

Senator DOMENICI. Thank you very much.

Would you care to address the committee, Mr. Porter?

Mr. PORTER. I am John Porter, manager of the Dolores Water Conservancy District.

Dolores has been funded. We closed the gates on Dolores Dam on March 19 and are beginning to store water and what a thrill that is. Today I want to testify on behalf of the Animas-La Plata which is a sister project. It's a sister because the lands are the same type, the people are the same type, the climate is the same type, and the needs are the same type, especially with regard to Indian water rights, and we think the Animas-La Plata can go a long way to help us cooperate together and solve that problem.

Thank you, Mr. Chairman.

Senator DOMENICI. Thank you very much.

STATEMENT OF QUINCY CORNELIUS

Mr. Cornelius, would you care to address the committee?

Mr. CORNELIUS. Mr. Chairman, I would simply like to voice my support for the Animas-La Plata project and, in the interest of time, concur with Chairman Dunlap's remarks.

STATUS OF REPAYMENT CONTRACT

Senator DOMENICI. Let me just ask, what is the status of the schedule for finalizing repayment contracts with the project beneficiaries?

Mr. KROEGER. At this point, some negotiations, some conversation has been held with the Bureau of Reclamation, but nothing final has been done. But as Mr. McDonald has indicated, funds have been set aside in Colorado whereby we can do some negotiating.

Senator DOMENICI. Do you believe that the local interest will be able to meet the new repayment requirements of the recently enacted Reclamation Reform Act?

Mr. KROEGER. Yes, we can do this; the local interest can do this.

Senator DOMENICI. So the committee should not anticipate any problems with reference to that, if they proceed to fund the project, is that correct?

Mr. KROEGER. That's correct. I think there is no problem at all in that matter.

Senator DOMENICI. We are going to hear further testimony with reference to the Narrows project.

Let me just say, Dolores has always been heavily supported by the committee, as you know, and we are delighted you made progress with that project.

Mr. PORTER. I didn't thank you enough for that support.

Senator DOMENICI. You don't have to.

Let's proceed.

Is Ival Goslin, executive director of the Colorado Water Resources and Power Development present? We understand he will have written remarks relative to both Narrows and Animas-La Plata. We will make that part of the record immediately upon receipt.

COLORADO RIVER BASIN PROJECTS

STATEMENT OF GERALD ZIMMERMAN, EXECUTIVE DIRECTOR, UPPER COLORADO RIVER COMMISSION

Senator DOMENICI. Mr. Gerald Zimmerman, executive director of the Upper Colorado River Commission, regarding the Colorado River basin project.

Delighted to have you, sir.

Mr. ZIMMERMAN. Thank you.

I am Gerald R. Zimmerman, executive director of the Upper Colorado River Commission located in Salt Lake City, Utah.

Mr. Chairman, the Upper Colorado River Commission is an interstate compact administrative agency created by the Upper Colorado River Compact. The State members of the Upper Colorado River Commission originated in Colorado, New Mexico, Utah, and Wyoming. The commission, since its inception, has maintained active participation in the development, utilization, and conservation of water resources in the Colorado River basin. The member States of the Upper Colorado River Commission vigorously support a constructive and progressive water resource development program for the Upper Colorado River basin during fiscal year 1985.

Those people are interested in water resource development in the basin and appreciate the privilege of appearing before this subcommittee in support of appropriation of funds to continue the construction and operation of the Colorado River storage project and the participating projects.

Representatives from each of the commission's member States will be presenting either oral or written testimony to this subcommittee in support of specific appropriations to reflect the official position of each of the member States of the Upper Colorado River Commission. Those statements will address the specific appropriations needed for the projects and programs involving the Colorado River storage project and the participating projects.

The Upper Colorado River Commission also supports the new construction starts program requested by each of the member States because these programs are necessary to develop the needed water supply in those States. The commission urges funding of a viable water resource development program in the Upper Colorado River basin inasmuch as that program not only is an asset to each of the upper division States, but they are also capital improvements that have national benefits.

The Upper Colorado River Commission also supports the development of the Colorado River water quality improvement program. This program has received the endorsement of the seven States of the Colorado River basin and has as its purpose the reduction of salinity in the river system. A more detailed statement on this program will be presented in testimony by the Colorado River Basin Salinity Forum.

Mr. Chairman, on behalf of the Upper Colorado River Commission, I want to thank you for the opportunity to submit this statement and hope the committee will fully consider it.

Senator DOMENICI. Thank you very much. We are much appreciative. Let me ask you, we are right on schedule and have 30 seconds, so I will just take an aside.

How concerned is the Upper Colorado River Commission about the Supreme Court decision that could almost abrogate the compacts between the States and their interpretation of the commerce clause? Is active thought being given as to what ought to be done realistically to a system in the *Nebraska* case?

Mr. ZIMMERMAN. The Upper Colorado River Commission has not taken an official position concerning this. I believe the members of the commission fully believe that the Upper Colorado River Compact and the Colorado River Compact fully protect each of the States' interests and their water resources; at least they would hope that is the case. If it isn't, they would appreciate any congressional help in assuring that those States have the water resources.

Senator DOMENICI. Vice versa, we were hopeful you all would tell us how to do it, but in any event, that will be a—we appreciate your testimony and obviously you have accommodated the committee by making it brief. We are sorry we can't listen to you in more depth. We appreciate your comments.

Mr. ZIMMERMAN. Thank you, and each of the States will be providing their testimony.

Senator DOMENICI. We have the very distinguished Governor of the State of Utah who has just arrived.

Governor, will your schedule accommodate us just waiting a few moments to see if your senior Senator arrives? We will get on with it if you can't. We are going to have Mr. Gary Friehauf, secretary-manager of the Lower South Platte Water Conservancy District.

Senator Mattingly, we are delighted you arrived, and we will take one additional witness and then we will turn the meeting over to you. Is that satisfactory with your time schedule?

Senator MATTINGLY. That is fine.

Senator DOMENICI. Would you proceed, please.

NARROWS PROJECT, COLORADO

STATEMENT OF GARY FRIEHAUF, SECRETARY-MANAGER, LOWER SOUTH PLATTE WATER CONSERVANCY DISTRICT

ACCOMPANIED BY:

DONALD W. HAMIL, PRESIDENT, LOWER SOUTH PLATTE WATER CONSERVANCY DISTRICT
STEVE TREADWAY, VICE PRESIDENT
MAURICE LEFEVER, DIRECTOR

Mr. FRIEHAUF. I have Donald Hamil, president of the Lower South Platte Water Conservancy District with me who will make oral presentation this morning.

Mr. HAMIL. Mr. Chairman, I am Donald Hamil, president of the Lower South Platte Water Conservancy District, and it is an honor for me to appear before this distinguished committee so that the long-awaited Narrows unit, Colorado, a participating unit of the Pick-Sloan Missouri River basin project, can proceed to construction.

With me today is the vice president of our district, Steve Treadway, and one of our directors, Maurice Lefever, as well as Gary Friehauf, our secretary-manager.

My oral testimony will summarize the written testimony, but I request a full copy of the written testimony be entered into the record.

[The statements follow:]

STATEMENT OF DONALD W. HAMIL, PRESIDENT, LOWER SOUTH PLATTE WATER CONSERVANCY DISTRICT

The Lower South Platte Water Conservancy District is honored to appear before this distinguished committee today, to once again submit our appeal for construction funds for the long awaited Narrows Unit - Colorado, a participating unit of the Missouri River Basin Project.

Today we sincerely request this committee include an appropriation of five million dollars for construction activities on the Narrows Unit. It is anticipated that these funds will be utilized for the purposes of right-of-way acquisition, and for construction designs for railroad, highway and other required relocations. We have requested the Bureau of Reclamation to indicate capability for utilization of construction appropriations for F.Y. 1985. The Bureau has indicated that an appropriation of five million dollars could be utilized.

Mr. Chairman, and committee members, once again I want to state that it is an honor to appear before you. Today is approximately one month short of being the twentieth anniversary of the formation of the Lower South Platte Water Conservancy District. And in June 1964, the first meeting of the Board of Directors was held in Sterling, Colorado. At that time the Narrows Unit had been authorized by the United States Congress as part of the Pick Sloan Missouri River Basin project pursuant to the 1944 Act of Congress, and the 1946 amendments. Subsequently it was determined that it would be a wise decision to reanalyze the project and to resubmit the Narrows Unit to the United States Congress for consideration and reauthorization. On November 25, 1968, hearings were held in Fort Morgan, Colorado by the House Subcommittee on Irrigation and Reclamation on Interior and Insular Affairs. On August 28, 1970, the authorizing legislation was signed into law, again authorizing the Narrows Project.

In the intervening years, the Lower South Platte and Central Colorado Water Conservancy Districts entered an application in the District Court in the State of Colorado, requesting a water right for the project. That right was granted, and since that time, both districts have been making every effort necessary to prove continued due diligence for that conditional decree.

In 1973, this committee appropriated one million dollars to initiate the construction activities on the Narrows project. However, due to legal concerns, over newly passed environmental laws, actual construction activities were not begun until 1976, following completion of the Final Environmental Statement and execution of a repayment contract with the United States. First construction activity by the Bureau of Reclamation was to purchase right-of-way. About 2,300 acres of land was purchased prior to termination of activities resulting from the infamous Carter "Hit List", of February 1977. Those acres are still owned by the United States and are being leased for agricultural purposes.

Since 1977 the United States Department of Interior, the State of Colorado, and the two water conservancy districts, funded and participated in various studies of Colorado water needs, and the Narrows project. The activities culminated with our request for construction activities to resume in F.Y. 1982. We thank this committee for including language in F.Y. 1982 appropriations legislation directing the Department of Interior to reprogram funds and to prepare the studies necessary to update the environmental statement and to ready the project to resume construction. These preliminary activities have been completed. During the month of March, 1984, the "Supplement to the Final Environmental Statement", and "Addendum #2" to the "Definite Plan Report" have been completed by the Region, submitted to the Commissioner for review prior to submittal to the appropriate federal agency.

At this time we are ready to resume construction on Narrows. We have requested the Bureau of Reclamation to indicate capability for utilization of construction appropriations for F.Y. 1985. The Bureau has indicated that an appropriation of five million dollars could be utilized. Therefore, we sincerely request this committee include an appropriation of five million dollars for construction activities on the Narrows Unit. It is anticipated that these funds will be utilized for the purposes of right-of-way acquisition, and for construction detail designs for railroad, highway, and other required relocations.

The statement of capability by the Bureau of Reclamation included a reference to local cost-sharing. The State of Colorado and the local sponsoring agencies are willing to consider upfront cost-sharing, should that in fact become a requirement, expressed by Congress. The Narrows project has been authorized twice by the United States Congress. Neither of those authorizations indicate any desire by the United States to have non-federal entities provide upfront cost-sharing. The two sponsoring water conservancy districts have executed a repayment contract with the United States for their repayment pursuant to the statutes and Rules and Regulations of the United States at the time of execution. The Narrows is a participating unit of the Pick-Sloan Missouri River Basin Project; therefore, the U.S. Treasury will be fully reimbursed for the project's costs allocated to irrigation water supply.

With regard to HR 3958, we were very disappointed by the removal of construction funds from your version. A review of the Narrows construction records reveals that President Nixon signed the bill that provided the first construction money for Narrows in 1973, President Ford continued those appropriations. In 1977 President Carter reversed that process. We in Colorado were very certain that with the change in 1981, the wrongs would be modified and Narrows construction could be resumed.

At this time we strongly encourage the Senate to push HR 3958 through the full Senate and to conference with the House as soon as possible, and to allow an appropriation for Narrows to be included in the conference version of HR 3958. However, our request for F.Y. 1985 should not be confused with the $500,000 included in the House version of HR 3958. If the $500,000 is appropriated for F.Y. 1984 the Bureau will have adequate time to utilize that funding this fiscal year. The $5,000,000 dollars for F.Y. 1985 is an amount which can be utilized in the coming year.

The Lower South Platte District holds a preliminary permit for hydro generation, F.E.R.C. No. OEPR-4906-CO. This permit will expire March 1, 1985 . The district has spent nearly $30,000 on studies to determine feasibility of such an installation. Within the next month the district must decide whether or not to proceed with the next phase at an estimated cost of $60,000.

At this time the non-federal development of Narrows hydro generation appears to be as feasible as most of the projects proposed for federal development contained in HR 4275. (Comparing cost to install, with annual kilowatt hours of energy produced). It would seem obvious that studies should proceed to license. However, this presents a problem that if a license is awarded by FERC, the district is limited to a two year period in which to initiate construction (Federal Power Act, Section 13), and a specified time in which to complete all construction. Our problem centers on the immediate initiation of construction on Narrows. It will cost the district nearly $200,000 for the feasibility and license engineering work. At this particular time we appear to be between that well known, rock and a hard spot. Proceed on a gamble that construction will proceed on an orderly schedule, or wait and lose our permit, is the dilemma.

It is plain to see that an appropriation for construction would be very valuable to us in making the best decision at this time.

The proposed installation of hydro generation equipment would be a non-federal development. Hydro development was not included in the Narrows Authorization Act of 1970.

Recreation features will be one of the major features of the project. Narrows reservoir will be a major recreation facility for over 3,000,000 people along Colorado's Front Range by the year 2000.

The Bureau of Reclamation and Colorado Division of Parks and Outdoor Recreation have developed estimates indicating that initial annual use of Narrows recreation areas will exceed 1,190,000 visitor days. This undoubtedly is a very conservative estimate in light of the projected growth of the Denver Metro area. Accepted population projection indicates that over 2,500,000 people will inhabit the Denver area by the year 2000 an increase of 900,000 between 1980 and 2000. These projections do not include growth in other Front Range counties near the project area.

The South Platte Valley is the most populous region of the state, and one of the fastest growing regions in our nation. Narrows recreation facilities will be a great regional and national asset.

Flood control features are becoming of increasingly greater importance. In 1981 - one of our irrigation entities lost a $180,000 diversion structure. In 1983, flood damages exceeded $1,100,000 in Logan County alone. The Logan County Board of Commissioners adopted a Resolution supporting immediate construction of Narrows. Damages in Morgan, Sedgwick, and Washington Counties brought the total to more than $2,000,000.

Not only did we suffer damages, but the state engineer records show 2,000,000 acre feet of water lost in 1983, nearly six times the long term average.

Support of the project is as strong today as it has ever been. In 1981 the Nebraska Unicameral passed a Resolution in support of construction of the project. The Lower South Platte and Central Colorado districts have persisted in the Colorado courts to demonstrate their due diligence toward perfection of the water rights. Fort Morgan area Chamber of Commerce reaffirmed the standing Resolution in support of Narrows this past July.

This project has the continued support of, the Colorado Congressional delegation, the Governor of Colorado, the Colorado Water Conservation Board, and the support of the

Colorado State Legislature, as illustrated by SJR #6, which approved the Colorado Water Resources and Power Development Authority to participate in cost-sharing on the Narrows should the United States Congress determine that to be essential to construction of this project.

We submit to you that we have done virtually everything in our power in preparing our homework to proceed in construction. We have a schedule and are willing to proceed.

We appreciate the opportunity to appear before you today, and sincerely request your favorable decision by appropriating the $5,000,000 dollars to resume construction to the Narrows Unit.

STATEMENT OF COUNTY COMMISSIONERS OF LOGAN COUNTY, COLO.

CORRESPONDENCE

August 29, 1983

Mr. Pat Byrne, Director
Division of Disaster Emergency Services
Camp George West
Golden, CO 80401

Dear Mr. Byrne:

As per your correspondence of July 15, 1983, please find enclosed a resolution issued by the Logan County Board of Commissioners declaring that a disaster emergency situation exists in Logan County and that the Narrows Dam Project could have prevented said emergency situation.

As you are well aware, the flooding of the South Platte River has caused extensive damage to agricultural land and buildings, irrigation structures, and many County roads and bridges.

We have assessed the total damages of the flooding at $1,101,437 to date. However, this figure will increase as 19 irrigation companies have not registered their damage estimate reports. Logan County has incurred $42,884 in Emergency Expenses and will incur another $246, 539 in Permanent Restoration Expenses. Consequently, this will place a severe strain upon the County's financial resources considering the mill levy requirement/limitation and the lack of a sales tax in Logan County.

In addition, many local farmers and irrigation companies have been severly burdened by the flooding of the South Platte River (see attached itemization), as well as, the RE-1 Valley School District considering the fact that several students may not be able to complete their senior years at Caliche High School in Proctor because the Red Lion Bridge is washed out and not operable.

Hence, we urge Governor Lamm to issue an Emergency Proclamation and render immediate assistance to Logan County. Thank you for your attention to this matter and if I can be of any further assistance to you, please do not hesitate to contact me.

Sincerely,

Kent Gumina

Kent Gumina
Administrative Assistant

FLOOD DAMAGE ESTIMATE ITEMIZATION

Damage to Irrigation Structures

Prewitt Operating Committee	$ 11,355.21
North Sterling Irrigation District	44,959.38
Sterling Irrigation Company	110,000.00
Davis Brothers Ditch Company	5,000.00
Julesberg Irrigation District	25,000.00
Bravo Ditch Company	12,000.00
Ramsey Ditch Company	6,200.00
Peoples Ditch Company	7,000.00
Springdale Ditch Company	5,000.00
	$ 226,514.59

Damage to County Roads and Bridges

See attached itemization	$ 289,423.40

Damage to Agricultural Land and Structures

See attached report from ASCS	
Homes	$ 5,000.00
Service Buildings	1,500.00
Fences	40,000.00
Sedimentation and Erosion	4,000.00
Acreage Reduction Due to Flooding	535,000.00
	$ 585,500.00

Emergency Expenses Incurred

Logan County Road and Bridge Department	$ 42,884.00
Sterling Irrigation Company	6,731.00

TOTAL DAMAGE TO LOGAN COUNTY DUE TO FLOODING	$1,101,437.00

RESOLUTION NO. 28

Re: Flood of 1983

WHEREAS, public and private property located in Logan County, Colorado, was damaged and destroyed by flood waters from the South Platte River in 1983; and

WHEREAS, said flooding waters caused damages and losses to irrigation structures in the estimated amount of $226,514.59; damages to County roads and bridges in the estimated sum of $289,423.40; damages to agricultural land and structures in the estimated sum of $585,500.00; for total damages in Logan County, Colorado, of $1,101,437.00; and

WHEREAS, the emergency funds available in the budget for Logan County, Colorado, are insufficient to pay for the damages to the County roads and bridges or to assist others, and the Commissioners of this County believe the damages and losses it has incurred qualify for emergency assistance from the State of Colorado; and

WHEREAS, the losses and damages incurred by Logan County, Colorado, and its residents in 1983 could have been prevented, or at least minimized if the NARROWS DAM had been constructed, and Logan County would also have been spared damages from flooding of the South Platte River in 1965, 1969, 1973 and 1980 if the Narrows had been constructed.

NOW, THEREFORE, the Board of County Commissioners of the County of Logan, and State of Colorado, does hereby declare the South Platte River flood of 1983 to be a disaster emergency, and requests State Disaster Emergency Financial assistance from the State of Colorado;

That in addition to declaring a disaster emergency for Logan County, Colorado, the Board of County Commissioners do hereby RESOLVE that Secretary of Interior James G. Watt request the United States Congress to appropriate funds to immediately resume construction of the Narrows Dam on the South Platte River, State of Colorado; and

BE IT FURTHER RESOLVED that a copy of the resolution be forwarded to:

Secretary of Interior James G. Watt

United States Senator Mark Hatfield,
Chairman of Senate Subcommittee on Energy
and Water Development on Appropriations

United States Representative Tom Bevill,
Chairman of the House of Representatives
Subcommittee on Energy and Water Development
on Appropriations

United States Senator Gary Hart

United States Senator William Armstrong

Colorado Governor Richard Lamm

Lower South Platte Water Conservancy District

Adopted this 7th day of September, 1983.

THE BOARD OF COUNTY COMMISSIONERS
OF THE COUNTY OF LOGAN AND
STATE OF COLORADO

STATEMENT OF FORT MORGAN AREA CHAMBER OF COMMERCE

CHAMBER POLICY

Existing Chamber Policy was established in February, 1968 when the following resolution of approval was provided.

WHEREAS full and early development of water resources is of paramount importance to the development of the commercial, industrial, agricultural and recreational potential of this region, and

WHEREAS the Narrows Unit will provide supplemental water for 166,370 acres of prime land in the Lower South Platte Valley, and thus help to stabilize the agricultural and business economy of this area, and

WHEREAS the Fort Morgan Area Chamber of Commerce realizes that the Narrows Unit is of the utmost importance to the people of Morgan County by providing benefits in augmenting the availability and distribution of the total water supply, through flood control, and through creation of much needed recreational opportunities,

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Fort Morgan Area Chamber of Commerce that this organization make known its support for the development of the Narrows Unit, and respectfully asks that early authorization be given this project by the Congress of the United States, and

BE IT FURTHER RESOLVED that a copy of this resolution be forwarded to each member of the Colorado Congressional delegation and to the Lower South Platte Water Conservancy District.

I hereby certify that the foregoing resolution was approved and adopted at the meeting of the Board of Directors of the Fort Morgan Area Chamber of Commerce at Fort Morgan, Colorado on February 7, 1968.

William W. Whittier,
Secretary

THE IRRIGATIONISTS

Jake Kosman

Have indicated their approval of a plan subject to certain requirements.

ASSESSMENT PROBLEMS

Several phone calls reveal a growing concern about the increased assessments for commercial and industrial properties. A Task Force will be appointed at the Board meeting to review the problem.

STATEMENT OF THE CENTRAL COLORADO WATER CONSERVANCY DISTRICT

It is a great privilege for the Central Colorado Water Conservancy District to submit this written statement in support of the Narrows Unit of the Pick - Sloan Missouri Basin Program, South Platte Division, Colorado.

The Narrows Project remains an essential factor in meeting the water needs of the South Platte River Basin. Our request of this committee for fiscal year 1985 is an appropriation of $5,000,000.00. The purpose of these funds would be to reinitiate activities concerning the project.

We submit today that the project is needed much more now than it ever has been. In submitting this statement, we respectfully implore each committee member to consider the regional differences between the needs of semi-arid Colorado and other areas of our country.

The Narrows Project becomes more important to our area daily because the needs of the region are changing so quickly. Narrows is now a project for all the people of the eastern slope; farmer and city dweller alike.

How can the Narrows improve regional agriculture? Besides the many and varied benefits of a large multi-use project, Narrows can contribute greatly to existing agriculture. But, according to the study Agricultural Land Conversion in Colorado, published by the Colorado Department of Agriculture, "Renewable irrigated acreage served by renewable water supplies is no higher now than it was in 1959." And, "Two-thirds of the value of all Colorado crops is based upon irrigation." The Narrows project would provide 'security through storage' to existing producers while opening new lands to production.

Also mentioned in the study, "Eighteen percent of Colorado's current irrigated acreage (503,000 acres) depends upon nonrenewable ground water. Most of this acreage (406,000 acres) is located in the Eastern High Plains above the Ogallala Aquifer." It should come as no surprise that falling water tables are endangering the production of this area.

We submit that recharge of the Ogallala or surface water deliveries is possible with South Platte River water, but impossible without large scale storage (Narrows).

How can Narrows aid in orderly population growth? Our current population of 2.7 million is growing at an annual rate of 2.75 percent -- nearly three times the national rate. According to a recent study by the Department of Housing and Urban Development, "Front range population is expected to increase by one million residents by the year 2000. This growth will require an additional 200,000 housing units between 1985 and the year 2000."

Clearly, these new residents will need water. Rather than the present practice of cities acquiring senior agricultural water rights for human consumption, new and dynamic practices of sharing our water resources will come forth, if there is storage!

The Narrows Project, over time, will develop a tremendous volume of water which can be shared by urban and rural water users, through orderly and accepted exchange procedures.

Today, we ask for the help of the Federal Government to fund this incredibly important project.

Local financial support is a part of the Narrows Project financing. State front-end money has been offered to the Reagan Administration. The taxpayers of the area have been financially supporting this project through their taxes. They have demonstrated further support through the willingness to contract with the United States for repayment of the project's costs as prescribed in the acts of this Congress. The District also has a contract to pay the United States Treasury $91,000.00 per year for our apportioned share.

Greater payments will be made to the United States as the values of the agricultural commodities change. The water service contract also meets the administration's objectives in the area of repayment. The repayment escalator clause assures that the United States will receive a fair payment on their wise investment.

Colorado strongly supports the Narrows Project. The Narrows again became the number one priority for construction of the Colorado Water Conservation Board. The Governor and the State Legislature have recognized the increasing importance of the development of the water resources in meeting the demands placed on Colorado by the energy crises, food production, foreign exchange of agricultural commodities, and others, such as gasohol proposals. To meet these demands, the Colorado State Legislature has established a fund to meet the financial requirements for the development of Colorado's water resources. Monies are available from this fund to meet the State's share of the construction costs for future federal projects and other purposes.

Over the past years, we have enjoyed the opportunities to present to this committee myriads of facts and information outlining the need for the Narrows. Now, new efforts designed to develop and receive mutually beneficial use from Colorado resources enter into the picture. For example, a program designed to take agricultural water, place it in municipal use, then treat that water and return it to agricultural systems, is facing public opposition. You may ask why such a farsighted program would be opposed. We submit that the lack of storage facility such as the Narrows makes this type of program almost impossible. Agricultural water users must be assured of storage facilities.

At this point we raise the question of the contract as it represents the honor and word of the United States Government. As earlier mentioned, this sponsoring District executed a repayment contract with the Secretary of the Interior, on July 27, 1976. Since the initiation of the most recent activities on the Narrows in 1958, the people of the South Platte Valley have held this engagement with the Department of Interior to be one of honor and good faith. The contract represents the good faith of the United States to pursue the completion of the Narrows Unit. Throughout the intervening twenty-six years, we have complied with the laws of this honorable Congress and every mandate of successive Presidents from John F. Kennedy. We have consented to demands for changes by federal agencies. Many of these did not benefit the water user but increased the project cost for water users. The people have spent years of time, hundreds of thousands of dollars, and have made the contractual commitments. We submit that the actions of the current administration suggests that this contract, the word of the United States, is meaningless.

Our appeal to this committee for funding includes an appeal that the contract and the word of the United States be restored to an elevation of honor and meaningfulness.

Energy is the most critical issue in this country today. Denver, Colorado is being looked upon as the energy capital of the country. The United States must take progressive and immediate action to eliminate our dependency upon foreign energy. This means development of coal and oil shale for which Denver will be the hub. The increase in population is going to have a major impact on the "normal" or "base" water supply of our area. Again, this places further importance on the ability to capture the more unusual flows of large volume.

In summary, we appeal to Congress to:

a) Appropriate $5,000,000.00 for the reinitiation of construction activities on the Narrows Project for FY-1985.

The attention of the members of this committee is greatly appreciated.

Thank you.

Colorado Senate Joint Resolution No. 6

BY SENATORS Anderson, Noble, Yost, Allshouse, Beno, Bishop, Clark, Dodge, Kadlecek, MacManus, Meiklejohn, Phelps, P. Powers, D. Sandoval, P. Sandoval, Schaefer, Soash, Stockton, and Susemihl;
also REPRESENTATIVES Younglund, Lillpop, Paulson, Spano, Armstrong, Chaplin, Chavez, Davoren, DeNier, Hamlin, Hastings, Herzog, Larson, Lucero, Mielke, Minahan, Pena, Reeves, Robb, Shoemaker, Spelts, and Taylor.

AUTHORIZING THE COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY TO PROCEED WITH THE CONSIDERATION OF THE NARROWS AND ANIMAS-LA PLATA FEDERAL PROJECTS.

WHEREAS, The Congress of the United States has authorized the construction of the Narrows and Animas-La Plata projects; and

WHEREAS, The Bureau of Reclamation of the United States Department of the Interior has completed studies for both projects and has published the same in the form of House Documents (United States Congress), definite plan reports, environmental impact statements, and various supplementary materials; and

WHEREAS, Said documents, reports, statements, and materials include analyses of the engineering, economic, and regulatory feasibility of both projects; and

WHEREAS, The Colorado Water Conservation Board has, pursuant to section 37-95-107, Colorado Revised Statutes 1973, reviewed said documents, reports, statements, and materials and has forwarded the same for both projects to the General Assembly, together with its recommendations thereon; and

WHEREAS, The construction of either project will preserve, protect, conserve, and develop the water resources of the state; promote the beneficial use of the waters of the state for the protection and preservation of the public health, safety, and welfare; create and preserve jobs and employment opportunities; and improve the economic welfare of the people of the state; and

WHEREAS, The General Assembly deems either project to be in the interests and to the advantage of the people of the state; and

WHEREAS, It appears that nonfederal sources of front-end cost-sharing will be required before the President and the Congress of the United States will act favorably on appropriations for the two said projects; and

WHEREAS, The General Assembly recognizes that the Colorado Water Resources and Power Development Authority is the public entity charged with the responsibility to develop the water resources in the state of Colorado; now, therefore, Be It Resolved by the Senate of the Fifty-third General Assembly of the State of Colorado, the House of Representatives concurring herein:

That the Colorado Water Resources and Power Development Authority be and is hereby authorized, pursuant to section 37-95-107, Colorado Revised Statutes 1973, to proceed with the consideration of the Narrows and Animas-La Plata projects.

Fred E. Anderson Fred E. Anderson PRESIDENT OF THE SENATE	C B Bledsoe Carl B. Bledsoe SPEAKER OF THE HOUSE OF REPRESENTATIVES
Marjorie L. Rutenbeck Marjorie L. Rutenbeck SECRETARY OF THE SENATE	Lorraine F. Lombardi Lorraine F. Lombardi CHIEF CLERK OF THE HOUSE OF REPRESENTATIVES

Pursuant to 37-95-107(5), C.R.S. 1973, this resolution is presented to the Governor for signature.

APPROVED Feb 3, 1982 2:16 pm

Richard D. Lamm
GOVERNOR OF THE STATE OF COLORADO

STATEMENT OF LARRY WINDERS, EXECUTIVE DIRECTOR, LOGAN COUNTY (COLO.) CHAMBER OF COMMERCE

The Logan County Chamber of Commerce encourages and supports the funding necessary for the construction of the Narrows Dam project.

We are ready and eager to work with your organization to see this project completed at the earliest possible time.

Mr. HAMIL. We request this committee to include in the fiscal 1985 appropriations bill for energy and water development $5 million for the Narrows Dam. This money will be used to resume the construction activities of the project which were underway in 1977 prior to the suspension of activities by that administration. The Narrows project has a very long history dating back into the early 1900's. It has been nearly 20 years since our district was formed. The court order was signed May 8, 1964. Twenty years is a very long time to keep the faith. It took 6 years to perform the necessary studies to submit Narrows to Congress for authorization, which was accomplished on August 28, 1970.

The NEPA requirements were met, the two conservation districts involved signed repayment contracts, and construction began in 1976.

In 1978, this committee and the Congress included an appropriation for construction on Narrows only to have that bill vetoed.

In 1982, the Congress again spoke to the issue of Narrows construction by directing the administration to reprogram available funds to make necessary appraisals and to perform necessary studies to ready the project for resumption of construction. This past September, the House passed H.R. 3958 which provides $500,000 for construction. We wish the Senate could have acted on that proposal quickly and that Narrows would be included.

Today, we sincerely request this committee to push the bill through the Senate and to yield to the House. Allow funding to be included in a conference report.

However, it must be clearly understood that the $500,000 is adequate to the remainder of 1984, but to begin a meaningful construction schedule, $5 million is essential for fiscal year 1985. The Bureau has stated capability to utilize that amount.

HYDROPOWER POTENTIAL

The lower South Platte holds a preliminary permit for the Federal Energy Regulatory Commission for a non-Federal hydropower development. We are reaching an impasse on that endeavor. The Federal Power Act sets time requirements for construction to begin. After a license has been issued, we have 1 year remaining on the preliminary permit within which to submit a license application. We spent $30,000 to complete the preliminary feasibility study, which is very favorable.

However, without initiation of Narrows construction, continuation of licensing may well be a waste of our effort. It is expected to cost nearly $200,000 to complete the licensing prerequisites.

Our local and State support is very strong at this time. The flooding of 1983 has reinforced the obvious necessity for Narrows. Logan and Morgan County commissioners have prepared summaries of damage which exceeds $2 million within those counties. Sedgwick and Washington Counties had additional damages. Water users in Nebraska also suffered significant damages as to irrigation diversions facilities.

In 1982, we lost 2 million acre-feet of water, nearly five times the long-term average out of the State, into the Gulf of Mexico.

Accepted population projections indicate that over 2.5 million people will inhabit the Denver area by the year 2000, an increase of 900,000 people between 1980 and 2000.

These projections do not include growth in other front range counties near the project area. Recreation features will be one of the major features of the project. Narrows Reservoir will be a major recreation facility for over 3 million people along Colorado's front range by the year 2000.

In closing, we thank this committee for their support in the past and request your continued efforts in behalf of the Narrows. For 20 years, local taxpayers have supported our effort. We have invested all of our resources over that period. The State of Colorado has continuously led in supporting Narrows, which remains a priority with the Colorado Water Conservation Board. The State is prepared to assist in repayment of project costs as required by the applicable laws on recreational facilities and the fish and wildlife enhancements. Yes, the State is ready to proceed with these segments. The district has signed contracts with the United States for repayment of irrigation of industrial and municipal water. We are ready to move forward. We thank you for this opportunity to appear here today and respectfully request your favorable decision.

I have also submitted some resolutions of support from the Colorado General Assembly and the Governor of Colorado, Morgan County Chamber of Commerce.

Senator DOMENICI. I understand there are other witnesses here, Mr. Hamil, that we are not going to call on who are not coming to testify in behalf of the Narrows; is that correct? Do we have additional people, director of the Lower South Platte Water Conservancy District?

Mr. FRIEHAUF. They are in the audience, Mr. Chairman. They did not approach the table.

Senator DOMENICI. Introduce them.

Mr. FRIEHAUF. Steve Treadway, vice chairman of the board of directors, and Maurice Lefever, director from Morgan County.

Senator DOMENICI. Delighted to have you both.

Senator Mattingly, did you have any questions regarding this project?

Senator MATTINGLY. No, I don't, Mr. Chairman.

ENVIRONMENT PROBLEMS

Senator DOMENICI. Thank you very much.

Let me just ask, with regard to the environmental problems, is the whooping crane issue about resolved? Can somebody tell us that?

Mr. FRIEHAUF. Probably something you never heard before, but the U.S. Fish and Wildlife Service and Bureau of Reclamation have come to an agreement on that issue and have established a format for a study which will include Wyoming, Nebraska, and Colorado, as well as the whooping crane trust fund to look into that issue. It has come to their realization water is not the answer as the habitat continues to degrade without development in Colorado and the South Platte. They are looking at ways of meeting the needs for that area without making prohibitive requirements on upstream States as far as water resource is concerned. We are very encouraged the regional directors of the Bureau and U.S. Fish and Wildlife Service have been able to reach this understanding.

Senator DOMENICI. Thank you very much. You are both excused.

PREPARED STATEMENTS

The subcommittee has also received prepared statements from the State of New Mexico, Mr. S.E. Reynolds, secretary of the New Mexico Interstate Stream Commission; Governor Ed Herschler of Wyoming; Governor Richard Bryan of Nevada; and the Colorado River Basin Salinity Control Forum.

Without objection, those statements will be incorporated in the record at this point.

[The statements follow:]

STATEMENT OF S. E. REYNOLDS, SECRETARY, NEW MEXICO INTERSTATE STREAM COMMISSION

SUMMARY

This statement is submitted in support of appropriations for the construction of water resource projects authorized to be built by the Bureau of Reclamation and the Corps of Engineers, for operation and maintenance of projects constructed by these agencies and for project investigations by these agencies.

In general, I support the President's fiscal year (FY) 1985 budget proposals for water resources. However, the President's FY 1985 budget does not include funds for the Animas-La Plata Project, Colorado-New Mexico. I urge that at least $1.35 million be included in the FY 1985 budget to initiate construction activities on this project. The Bureau of Reclamation has, in consultation with the states of Colorado and New Mexico and the local entities who would be the immediate beneficiaries of the project, selected a plan to regulate and deliver a water supply to the areas of use; all work on the environmental impact statement and the definite plan report has been completed. The Bureau has initiated discussions with the local entities on repayment contracts and none of these discussions has been unfavorable. The project is in all respects ready for construction and there is a great need for additional water in this area of the two states where oil, gas, uranium and coal development for energy is underway.

STATEMENT

BUREAU OF RECLAMATION

Colorado River Storage Project and Participating Projects

The Colorado River Storage Project Act, which became law in 1956, authorized a carefully planned and farsighted program for the development and use of waters of the Upper Colorado River Basin. To carry this program forward the President has recommended that $166.503 million be appropriated to the Bureau of Reclamation for FY 1985. This proposal includes $1.877 million for major grouting at Navajo Dam in New Mexico for correction of seepage. I support those recommendations.

The President's FY 1985 budget does not include funds for the Animas-La Plata Project a two-state project in Colorado and New Mexico which was authorized in 1968 by PL 90-537. The Bureau of Reclamation has, in consultation with the States of Colorado and New Mexico and the local entities who would be the immediate beneficiaries of the project, selected a plan to regulate and deliver water to the areas of use; all the work on the final environmental impact statement and the definite plan report has been completed. In FY 1982 the Bureau initiated discussions with the local entities on the terms and provisions of repayment contracts under which the local entities would repay their allocated share of the construction costs and annual operation and maintenance costs. Those entities have indicated their intent to enter appropriate contracts. The project is in all respects ready for construction and there is a great need for the additional water supply which will be made available by the projects in this area of the states where oil, gas, uranium and coal development for energy is underway. I urge that at least $1.35 million be appropriated in FY 1985 to initiate construction.

I also urge that appropriations for units of the Colorado River Storage Project and Participating Projects in the other Upper Basin states be adequate for orderly project development.

Carlsbad Irrigation Project

The sum of $500,000 is proposed in the President's FY 1985 budget to continue the rehabilitation work on the laterals and sublaterals in the Carlsbad Irrigation Project distribution system. The work, which will be done by the Carlsbad Irrigation District under the Rehabilitation and Betterment Act, will conserve water in the District. I support the FY 1985 budget proposal for this project.

Brantley Dam and Reservoir

The President's FY 1985 budget includes $45.037 million for construction on the Brantley Dam and Reservoir Project in the Pecos River Basin. The Brantley Project was authorized for construction by PL 92-514 in 1972. The basic purpose of the project is the protection of life and property in the vicinity of the city of Carlsbad. The Brantley Dam would replace the unsafe McMillan Dam, which was reconstructed by the U.S. Reclamation Service in 1908, and would provide additional capacity for the storage of flood waters. Two percent of the cost is allocated to irrigation, recreation and fish and wildlife purposes and one percent of the cost is allocated to highway relocation; the balance of the cost is allocated to safety of structures and flood and sediment control. I support the President's FY 1985 budget proposal for this urgently needed project.

Central Arizona Project

The Colorado River Basin Project Act, PL 90-537 enacted in 1968, authorized construction of the Central Arizona Project in Arizona and New Mexico. The President's FY 1985 budget proposed $187.6 million to continue construction of this project. The Hooker Dam and Reservoir, or suitable alternative, in southwestern New Mexico is authorized for construction as a unit of the Central Arizona Project. The President's proposed budget includes $749,000 to continue Stage II studies on this unit. I support the President's budget proposal for funding the Central Arizona Project.

Colorado River Basin Salinity Control Project-PL 93-320, Title I

The President's FY 1985 budget includes a total of $30.463 million for continued construction on the Yuma Desalting Plant and related facilities. I fully support the President's FY 1985 budget proposal for this program.

Colorado River Water Quality Improvement Program

The President's FY 1985 budget includes $20.01 million for construction of three salinity alleviation units authorized by Title II of PL 93-320; Grand Valley, Paradox Valley and Las Vegas Wash units. The President's FY 1985 budget also includes $1.8 million for advanced planning of two additional units, Lower Gunnison and Big Sandy, that would improve the water quality of the Colorado River. The salinity concentrations in the Lower Colorado River are approaching levels that are of serious concern in municipal, industrial and agricultural uses. The construction of presently authorized water projects and planned private water development will cause further increases in salinity concentrations in the Colorado River. Completion of advanced planning and subsequent construction of the units proposed for advance planning, coupled with completion of construction of the three units authorized under Title II of PL 93-320, will provide the most cost-effective means of making the near-term, salt-load reductions necessary to maintain water quality levels at the 1972 level in the lower mainstem of the Colorado River, while allowing the basin states to develop their compact apportioned waters. In addition, the President's FY 1985 budget includes $5.635 million for general investigations of other potential salinity control programs. I support the President's proposal that a total of $27.445 million be included in the FY 1985 budget to provide funds for construction, advance planning and general investigations under Title II of PL 93-320 as described above.

Closed Basin Division, San Luis Valley Project-Colorado

The President's FY 1985 budgt includes $16.883 million for construction of the Closed Basin Division. Work will include installation of wells, furnishing and installing pumps and motors, construction of portions of the canal, lateral and transmission systems. Land acquisition and archeological mitigation work will also continue. The project will facilitate Colorado's delivery of water to downstream states in compliance with the Rio Grande Compact. I support the President's proposed FY 1985 budget for this project.

General Investigations

The proposed Bureau of Reclamation program for FY 1985 includes several general investigations of interest to New Mexico. These are: 1) $240,000 to continue the Lake Meredith Salinity Control Project investigation, Texas and New Mexico; 2) $282,000 for Environmental and Interagency coordination activities in New Mexico; 3) $10,000 for minor work in connection with completed project investigations in New Mexico; and 4) $112,000 to provide technical assistance in the form of expertise in hydrology, engineering or other disciplines to aid the state in water resource planning. I support the President's proposal that a total of $644,000 be included in the FY 1985 budget for the general investigations described above.

Operation and Maintenance Program

I support the President's FY 1985 budget for operation and maintenance of Bureau of Reclamation projects in New Mexico and for projects in adjacent states in which New Mexico has an interest. These include: 1) Carlsbad Project, $47,000; 2) Pecos River Basin Water Salvage, $375,000; 3) Rio Grande Project, $1,822,000; 4) Middle Rio Grande Project $8,149,000; 5) San Luis Valley Project, $460,000; 6) Soil and Moisture Conservation Programs in New Mexico, $325,000; a total of $11,178,000.

CORPS OF ENGINEERS

Surveys

The President's FY 1985 budget includes $200,000 to continue the Corps of Engineers' survey - Gila River and

Tributaries Upstream from Camels back Dam Site, Arizona and New Mexico. The survey is to investigate the feasibility of providing solutions to the many flood problems in the area. During 1983 another severe flood resulting from heavy rain occurred on the San Francisco River in New Mexico and Arizona. Extensive flood damage to irrigated lands, irrigation systems, towns, roads and bridges and private property resulted. The Corps' survey is scheduled for completion in late 1987. An earlier completion date for the report could be very helpful to address the flood problems in the area. Accordingly, I urge that a total of $500,000 (an increase of $300,000 over the President's budget proposal) be appropriated in FY 1985 to the Corps of Engineers for this survey.

The President's FY 1985 budget includes $425,000 to continue the Corps of Engineers' survey - Rio Grande and Tributaries, Colorado and New Mexico. The survey is directed at determining improvements for solution of flood problems at Rio Grande basin above El Paso, Texas. I fully support the President's budget for this survey.

The President's FY 1985 budget includes $600,000 for the Corps of Engineers survey - Rio Grande and Tributaries, Bernalillo to Belen, New Mexico. The work proposed is continuation of preparation of the general design memorandum on reconstruction of the levees along the Rio Grande to provide additional flood protection to the adjacent lands which are changing from rural agricultural to urban. However, under the proposed budget the schedule for completion of the report is late 1987. An earlier completion date for the report is desired for this urgently needed flood control project. Accordingly, I urge that a total of $900,000 (an increase of $300,000 over the President's budget proposal) be appropriated in FY 1985 to the Corps of Engineers for this survey.

The President's FY 1985 budget does not include funds for the Corps of Engineers survey - Alamogordo Diversion. The proposed project to provide flood protection to the City of Alamogordo, New Mexico was reclassified to active status in September 1982. However, no funds have been provided to the Corps of Engineers to initiate a supplement to the General Design Memorandum for this project. I urge that a total $350,000 be appropriated in FY 1985 to the Corps of Engineers to initiate a supplement to the General Design Memorandum for this project.

Advanced Engineering and Design

The President's FY 1985 budget includes $300,000 for the authorized Corps of Engineers project - Rio Grande Floodway, Truth or Consequences Unit, New Mexico. The work is to continue design of the proposed Cuchillo Negro Dam for flood control on Cuchillo Negro, a tributary of the Rio Grande at Truth or Consequences. I fully support the President's FY 1985 budget proposal for this project.

Operation and Maintenance Program

I support the President's FY 1985 budget for appropriations for operation and maintenance of Corps of Engineers projects in New Mexico. These include: (1) Abiquiu Dam $2,171,000; (2) Cochiti Dam $923,000; (3) Conchas Dam $660,000; (4) Galisteo Dam $144,000; (5) Jemez Canyon Dam $235,000; (6) Santa Rosa Dam $463,000 and (7) Two Rivers Dam $272,000; a total of $4,868,000.

CONCLUSION

The excellent water resource planning and development work being done by the Bureau of Reclamation and the Corps of Engineers in New Mexico and adjacent states is essential to the welfare of this state and the nation. I sincerely appreciate the opportunity to present this statement in support of appropriations for the work of these agencies.

STATEMENT OF GOV. ED HERSCHLER OF WYOMING

Mr. Chairman and Members of the Committee:

The people of the State of Wyoming are acutely interested and affected by the water-related functions and activities of the United States Bureau of Reclamation. Water resource development continues to be a major concern to Wyoming, as our population grows and new industrial and energy developments materialize. The continued development of our water resources is of prime importance to the people of our Nation if we are to satisfy our country's escalating energy demands. The symbiotic relationship of energy and water development is unmistakeably apparent.

The Wyoming Legislature's commitment to water resource development has been both ardent and perennial. A comprehensive water development program was adopted during the 1982 Legislative Session; twenty-nine projects were selected for study and possible construction. Seven projects were added during the 1983 Session, two were authorized for construction. During the 1984 Legislative Session, construction was authorized for six projects and twelve projects were adopted for study or further study.

We are encouraged by the level of funding proposed for continuing preconstruction work for the enlargement of Buffalo Bill Dam on the Shoshone River. We would hope that other State-Federal cost sharing projects will be implemented in the same manner, both in Wyoming and in the Western United States.

We urge that funding be continued under the Construction Program for Dam Safety and Irrigation System Rehabilitation work throughout Wyoming. The funding of these activities is unquestionably justified to protect the Federal and State investments which have been made, as well as to bolster Wyoming's agricultural and ag-related sectors. Investment protection also necessitates the Bureau's Operation and Maintenance Program.

General Investigations carried out by the Bureau's Planning Program are becoming increasingly important and will continue to accrue greater importance in the future as demands for water and power grow. These investigations are a prime source of useful water resources information. Information is requisite in all water development considerations, and as water demands have increased, so has the need for information.

The State of Wyoming continues to support the reclamation program of the Bureau of Reclamation. The many benefits which have been realized to the Nation far exceed the costs incurred by the Federal Government and the states.

Thank you Mr. Chairman and Committee members for the opportunity to present this statement for the official record.

STATEMENT OF GOV. RICHARD BRYAN OF NEVADA

Mr. Chairman, Members of the Committee, I am pleased to see that the water development requirements of the residents of Southern Nevada continue to receive favorable consideration by your Committee, and that positive action is being taken by the United States Bureau of Reclamation of the Department of Interior, the Colorado River Commission of Nevada and the local water-using agencies toward the successful completion of the Second Stage of the Robert B. Griffith Water Project (formerly the Southern Nevada Water Project) authorized by Public Law 89-292. The careful development, management and wise use of our water resources in the State of Nevada is essential to the well being of the citizens of our state.

Construction of the second stage of this Project is nearing completion. Federal contracts in the total amount of $102,015,208 have been issued to date. All funds appropriated for the Second Stage of the Robert B. Griffith Water Project are reimbursable with interest to the Federal Government. In this regard, I wish to point out that the State of Nevada, through the Colorado River Commission of Nevada, is currently making annual payments to return the total reimbursable cost.

The State of Nevada is actively sharing in the cost of this water resource development project. The State designed and completed the enlargement of the Alfred Merritt Smith Water Treatment Facility. Sixty-three million dollars of State General Obligation Bonds were sold to fund these facilities which are necessary for a complete municipal and industrial water supply system.

The decision to make water available to the people of Southern Nevada was confirmed by the passage of Public Law 89-292 in October of 1965. As a result of this action, appropriations were made which allowed the First Stage of the Project to be completed in 1971, supplying 132,200 acre feet of water per year allotted to the State of Nevada from the Colorado River. It was then anticipated that this water supply system would be adequate until approximately 1990. However, our population growth and the rapid expansion of the area produced a larger demand for water, thus the necessity for the Second and final stage of the Project authorized under Public Law 89-292.

It is for these reasons that Fiscal Year 1985 appropriations in the minimum amount of $500,000 is being requested. I respectfully urge that your Committee support this appropriation which is in the current Executive Budget under "Drainage and Minor Construction" for Fiscal Year 1985. I believe it is clearly a matter of record that the Project fully meets or exceeds all the criteria of a wise and prudent water resource development, including the tests of safety, environmental considerations and cost effectiveness.

Your continued support of this vital municipal and industrial water supply project is appreciated.

STATEMENT OF THE COLORADO RIVER BASIN SALINITY CONTROL FORUM

The Forum members appointed by their governors, represent the States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming. The gubernatorial appointees to the Forum are listed on this letterhead. The objective of the Forum is to provide a basin-wide coordinated approach to controlling salinity of the Colorado River such that salinity concentrations can be maintained at acceptable levels while the states develop their compact apportioned waters. Most of the members of the Forum are from water resource and water quality agencies of state governments.

The seven Basin states are united in presenting this statement on behalf of appropriations to implement Title II of P.L. 93-320, the Colorado River Basin Salinity Control Act. This basin-wide program will directly benefit 15 million U.S. citizens that use Colorado River water.

The Administration's budget recommends $20,010,000 for funding of Title II of P.L. 93-320 for construction of three authorized salinity control units. They are the Paradox Valley and the Grand Valley Units which are both in Colorado and the Las Vegas Wash Unit in Nevada.

The President's budget recommends $5,635,000 for continuing investigations under the Colorado River Water Quality Improvement Program leading to feasibility reports on other salinity control units. The Forum believes that $5,635,000 can effectively be spent for this planning in FY 85.

The U.S. Bureau of Reclamation (USBR) has requested $1,800,000 for advanced planning. We request, in anticipation of Congressional action on the salinity legislation now before the Congress (S. 752 and H.R. 2790) that the appropriation committee should consider transferring funds from the general investigations program to advance planning where appropriate.

When the Colorado River Basin Salinity Control Act was passed by Congress in 1974, it was anticipated that, after some needed investigation, additional and needed cost effective salinity control projects would be identified. The Forum has concluded that there is now enough information collected by the Department of the Interior to warrant authorizing additional salinity control units. Legislation has now been introduced by western senators and congressmen to accomplish this.

The seven Colorado River Basin states worked collectively, under the auspices of the Colorado River Basin Salinity Control Forum, to draft this legislation and have suggested it to Congress. Senate Bill 752 and House Bill 2790 have the unanimous support of the Basin states and reflects the concerted effort of those states as they work together to find solutions to the water quality problems of the Colorado River.

In southwestern Colorado, Congress has authorized the Dolores Project. There may be an opportunity to combine some of the features of the Dolores Project and proposed features of the McElmo Creek Salinity Control Unit. Residents of the area are anxious to have this opportunity investigated. It is anticipated that there may be significant opportunities to share costs between these two efforts, reduce the total over all cost of the program and increase the amount of salt that can be removed from the Colorado River System.

The legislation being considered by the Congress does not ask for an increase in the ceiling of the amount of funds which can be expended under this program as established by Congress in 1974. The additional authorized units, as provided for in S. 752 and H.R. 2790 simply allows the Administration to implement the most cost effective salinity control units.

The requested funds will permit continued planning and construction on three previously authorized units: Paradox Valley, Colorado; Grand Valley, Colorado; and Las Vegas Wash, Nevada. It is essential that construction schedules be maintained and accelerated in order to meet the agreed upon objective of the federal government and the seven Basin states. Those objectives are that salinity concentrations in the lower mainstem of the Colorado River be maintained at or below 1972 levels. As required by federal law, the states have reviewed and have formally readopted these salinity objectives in 1978 and 1981 and are in the process of the 1984 review.

To maintain levels of salinity concentration, up to 2 million tons of salt per year, based on USBR studies, must be removed from the river system following the turn of the century. Unless these standards are met, rising salinity will cause many millions of dollars damage each year in the U.S. In addition, if the Colorado River salinity rises substantially, the U.S. could be faced with renewed water quality negotiations with Mexico. Thus the construction of salinity control units is essential to a large region of the U.S. and can assist materially with international comity with Mexico.

The Colorado River is an interstate and international stream, with most of its drainage area owned or controlled by the federal government. Thus, the heart of the implementation plan lies with the federal salinity control program identified in Title II of P.L. 93-320. Even with this significant federal responsibility, the states have agreed to, and are, reimbursing the federal government for 25% of the costs of the salinity control units constructed under the authorities of P.L. 93-320. The state sponsored legislative amendments would increase the cost sharing. This is accomplished through the two Colorado River Basin accounts (the Lower Colorado River Basin Development Fund and the Upper Colorado River Basin Fund).

Passage of the legislation now before Congress and the funding requested in this testimony is essential. The Colorado River Basin Salinity Control Forum urges an appropriation for FY 84 of $27,445,000 for the Bureau of Reclamation to use for salinity control in the Colorado River Basin. On behalf of the seven Colorado River Basin Salinity Control Forum, I thank you for the opportunity to present this statement.

PAPILLION CREEK AND TRIBUTARIES PROJECT, NEBRASKA

STATEMENT OF MEL HOIER, CHAIRMAN, PAPILLION VALLEY PRESERVATION ASSOCIATION

ACCOMPANIED BY EVERETT HOLSTEIN, DIRECTOR

Senator MATTINGLY [presiding]. The next witness will be Mr. Mel Hoier, chairman of the Papillion Valley Preservation Association. Welcome.

Mr. HOIER. Mr. Chairman, I have with me Everett Holstein, a director from our association. He has come along to back me up.

Senator MATTINGLY. Welcome. You may go ahead with your statement.

Mr. HOIER. I submit our written testimony.

Senator MATTINGLY. We will put it into the record.

[The statement follows:]

STATEMENT OF MEL HOIER, CHAIRMAN, PAPILLION VALLEY PRESERVATION ASSOCIATION

Once again we are contacting you to express our concern in regard to the Corps of Engineers latest proposed flood control for the Papillion Creek basin.

In 1975, the Papillion Valley Preservation Association had filed a suit against the Corps of Engineers to permanently enjoin the Corps from proceeding. A temporary injunction on dam site 10 halted the project. Since we have always advocated that we want flood protection, we met with our southern friends from the lower part of the watershed and tried to design a plan that would help everyone in the valley. The result being that in 1980 a seven-point design for action was prepared and approved by the county boards of Douglas, Sarpy, and Washington Counties, the Papio NRD, the Papillion Valley Preservation Association, and the Papio Flood Protection Association. It embodied the following points:

(1) Develop State legislation requiring control of water runoff in housing and/or commercial developments in the watershed; (2) promote the acceleration of Public Law 566 projects under the supervision of SCS and CAP projects of the natural resources district; (3) implement reasonable channelization measures to provide adequate runoff from the watershed; (4) continue enforcement of flood plain regulations by local units of government; (5) seek legislation bringing dam 20 back to active status; (6) urge funding and construction of dam 18; and (7) deauthorization by Congress of the original Corps Papio project and proposed site 3A or a permanent injunction of all dams except Nos. 18 and 20, 19, and 21.

This agreement was presented as a joint resolution in 1980 at the congressional hearings.

In 1981, our Congressman, Hal Daub, organized an ad hoc committee under the name of Papillion Watershed Coordinating Committee. It consists of 11 people, comprising interested governmental agencies and private organizations. It was hoped that these people could, with the help of the Corps of Engineers, find an alternative to dams as a vehicle for flood control. This committee requested Congress by resolution to provide money for construction of dam No. 20; planning for dam No. 18, and funding for a study of nonstructural alternatives to Public Law 90-483. This money was approved. There was also a stipulation provided in this resolution that unless unanimous agreement was reached in the ad hoc committee on the alternatives to be recommended by the Corps of Engineers study by September 30, 1983, the ad hoc committee would recommend deauthorization of all dams except 18 and 20.

In summarizing our last year's testimony, we asked for continued funding to support the study being done by the Corps of Engineers. We fully expected that the planning for this project would follow along the lines stipulated in the resolution presented by Congressman Hal Daub's ad hoc committee. Attached is a copy of Congressman Daub's testimony asking for nonstructural measures.

In November 1983, the Corps of Engineers came up with four plans to be considered by the coordinating committee. These plans are: (1) Nonreservoir plan—Rebuild UPRR bridge opening and channelization; (2) Revised authorized plan—dams 1, 2, 3, and 4 or one or more of these dams; (3) Modified authorized plan—dam 3A; and (4) No action plan.

As you will note, two of the plans have dams. We do not understand why this is even being considered. This isn't what was asked for. According to Public Law 89-72, neither of the plans involving dams are economically justified. Plan No. 2 consisting of dams 1, 2, 3, and 4 has 62 percent of its cost allocated to recreation. Plan No. 3 consisting of dam 3A has 57 percent of its cost allocated for recreational purposes.

According to the Corps own figures, plan No. 1—the nonreservoir plan—offers 50 percent flood protection; plan No. 2 offers 56 percent protection; and plan No. 3 offers 75 percent protection. What they fail to point out is that plans 2 and 3 both have to have plan No. 1 included to show this kind of benefit. Attached is the Corps of Engineer's fact sheet proving these points.

In summary, we know that we are premature in that the PWCC has not as yet voted on any of the plans being considered by the Corps, but we want to go on record as stating that we are opposed to any consideration for funding being given to a plan that is not nonstructural in nature.

It was with great reluctance that some of our board members agreed to "help" get dams 18 and 20 back onto the planning table. It now seems that perhaps this was a mistake. We would never have appeared before the Appropriation Committee asking for funds for dams 18 and 20 in 1980, for funds for a study in 1981, if we had not been given the assurance that there would be no dams in any Corps design for flood control in the Papio watershed.

The PVPA feels that with our Government showing the deficit that it does, we want to go on record as stating that we are opposed to any consideration for funding being given to any plan that is not economically feasible, that does not and will not have local support, and, most importantly, provides little if any flood protection for the vulnerable areas in the watershed.

EXCERPT FROM CONGRESSMAN DAUB'S TESTIMONY

The PWCC then went about drawing up a resolution to present to your committee. The original proposed resolution of March 14, which is attached, was passed unanimously by the PWCC and was to be taken back to each member's group for ratification. The resolution was requesting a new study of the Papillion Creek and tributaries and stated in part, ". . . to ask the Board of Engineers for Rivers and Harbors to review the reports of the Chief of Engineers on Papillion Creek and tributaries . . . to determine whether any alteration of the recommendations contained therein is advisable at this time with a particular view to developing a comprehensive plan for flood damage prevention . . . to include approved channelization and other structured measures, including levees, dikes, diversions, and bridge modifications, flood plain and watershed management and other nonstructural measures, and combinations thereof, as an acceptable alternative to dams 1 through 10, 12 through 15, 19 and 21 . . . and dam 3A."

This resolution failed to pass all of the groups represented. However, on March 21, 1981, the PWCC met once again and amended the original resolution with the additional words: . . . "If no agreement on the study is unanimously reached by September 30, 1983, by the PWCC, then the committee will support and pursue the deauthorization of the Papillion Creek and tributaries, Nebraska, with the exception of dams 18 and 20."

The resolution of March 21, 1981, of the PWCC was adopted by the Douglas County Board of Commissioners, the cities of Bennington, Papillion, and Ralston, and the Papillion Flood Protection Association.

The March 14, 1981, resolution of the PWCC was adopted by the Papio Natural Resources District.

The city of Omaha adopted the resolution of March 14, 1981, and added that they support the continued funding and construction of dams 18 and 20.

The Washington County Board of Commissioners, the city of Washington, and the Papillion Valley Preservation Association chose to adopt the resolution of March 14 and added that they support a halt to any further funding or construction of dams 18 and 20 until any such study by the U.S. Corps of Engineers is completed.

U.S. ARMY CORPS OF ENGINEERS—OMAHA DISTRICT

PUBLIC INFORMATION FACT SHEET

PAPILLION BASIN RESTUDY

INTRODUCTION. This fact sheet presents a summary of the Papillion Creek basin flood problem, the planning objectives, descriptions of three plans developed for consideration, and the no action plan. On Saturday, December 3, 1983, at 10 a. m., the Papio Watershed Coordinating Committee (PWCC) will meet in the Metropolitan Area Planning Agency Conference Room, 2nd floor of the Xerox Building, 7000 West Center Road, to discuss the various plans and the flexibility within each of those plans with Corps of Engineers representatives. The PWCC will then formulate its comments and tentatively select its preferred plan for submittal to the Corps by the end of December. A fact sheet will be published in February 1984 to present this information.

Final plan formulation studies will be conducted in early 1984. These studies will consider the PWCC preferred plan and will include the potential social, environmental, and economic impacts of all plans. Modifications to any of the plans may be required based on identified potential impacts.

Preparation of a Draft Environmental Impact Statement (EIS) will begin in December; the EIS is scheduled to be circulated to the public in April 1984. The purpose of the Draft EIS will be to present a comparative economic, social, and environmental impact analysis of alternative plans and the no action plan.

If you are not on our fact sheet mailing list and would like to have your name added to this list or if you have any questions concerning the Papio Restudy, please contact the Corps' Omaha District Office by telephone at 221-3133 or by mail at the address given below.

U.S. Army Engineer District, Omaha
ATTN: MROPD-E (Papillion Creek Restudy)
6014 U.S. Post Office and Courthouse
Omaha, Nebraska 68102

SUMMARY OF FLOOD PROBLEMS. The potential flood damages for existing and future conditions were evaluated for Big Papillion, Little Papillion, West Papillion, Cole, and Hell Creek basins. The existing damage potential was based upon current development within the flood plains and existing hydrology. The future damage potential was based on the additional development that could occur in the flood plains, increases in the value of residential contents, and future runoff conditions. The following paragraphs present a summary of this damage potential by basin.

Existing Conditions

Big Papillion Creek. The damage potential in the Big Papillion Creek basin is estimated to be $964,900 annually. The flood plain area upstream from Fort Street, in Douglas and Washington Counties, is mainly in agricultural use. The flood damage potential in that area is estimated to be $67,000 annually. The most extensively urbanized area is between Fort Street and Q Street; the damage potential is $855,600. Within that stream reach, 55 percent of the urban damage potential occurs in the area between L Street and West Center Road. The opening at the Union Pacific Railroad (UPRR) bridge is a major restriction to floodwater flows. The damage potential in the area downstream from Q Street to the confluence with West Papillion Creek is estimated to be $42,300 annually. This area is nonurban.

Little Papillion Creek. The existing flood damage potential in the Little Papillion Creek basin downstream from Interstate 680 is estimated to be $295,900 annually. The existing development is protected by Dam 11 and an improved channel from the mouth of the creek to just upstream from Maple Street. The level of protection provided to the existing development by these improvements varies from standard project flood protection near Dam 11 to 30-year flood protection in the area upstream from Interstate 80. The UPRR bridge is a major restriction to floodwater flows. The damage potential because of existing development downstream from Pacific Street to the confluence with the Big Papillion Creek is $233,800 annually; this is about 80 percent of the total damage potential under existing conditions. The remaining damage potential is due to development located between Pacific Street and Interstate 680.

West Papillion Creek. The existing damage potential in the West Papillion Creek basin with Dams 18 and 20 in place is $94,800 annually. The existing channel capacity and Dam 18 provide the Millard area of Omaha with 100-year flood protection. The urban damage potential of the West Papillion Creek in Omaha is estimated to be $14,000 annually. The existing channel capacity and Dams 18 and 20 provide Papillion with 30-year flood protection. The urban damage potential in Papillion is $18,200 annually. The nonurban damage potential, exclusive of the Omaha and Papillion areas, is estimated to be $62,600 annually.

Cole Creek. The damage potential to existing development between the mouth of Cole Creek and Military Avenue is $54,400 annually. About 54 percent, or $29,200, of this damage potential is due to the development located between Western Avenue and Maple Street.

Hell Creek. The damage potential at the existing level of development in the Hell Creek basin is $29,600 annually. Upstream from the UPRR bridge, where the flood plain is extensively urbanized, the flood damage potential is $16,100. Part of this area — the area between the UPRR bridge and Westwood Lane — is protected by a concrete-lined channel. The UPRR bridge and the West Center Road bridge are major restrictions to floodflows.

Remaining Basin. There are numerous areas in smaller tributary areas with relatively insignificant flood problems that have not been evaluated in detail in this study. These areas are located outside of the five creek basin areas that were studied in detail. Many of these areas are currently in agricultural land use and are expected to remain in this use.

Future Conditions

Future development will occur in the flood plains within the Papillion Creek basin. Most of this additional development will occur in the flood plains of the Big, Little, and West Papillion Creeks. The flood plains of Cole and Hell Creeks are essentially fully developed. The future flood damage potential, estimated for the year 2030, was based upon the historical growth rates identified in the Omaha-Council Bluffs Metropolitan Area Planning Agency's "Floodplain Management Activities in the Papillion Creek Watershed" published in March 1980. These growth rates were updated to 1983 and are approximately 13 acres of development per year in the Big Papillion Creek flood plain, 9 acres in the Little Papillion Creek flood plain, and 6 acres in the West Papillion Creek flood plain. This development was assumed to be elevated to at least 1 foot above the 100-year flood level in accordance with the Federal Emergency Management Agency (FEMA) Flood Insurance Program, hereinafter referred to as the Flood Insurance Program. The flood plain areas available for development excluded the FEMA floodway and public parks. This development will be subject to flood damage from floods that reach elevations greater than the future 100-year flood elevations.

Table 1 summarizes and compares the existing and future damage potential measured in expected annual damages for each creek. Table 1 also provides the average annual equivalent of the existing and future flood damages distributed evenly over time.

Table 1
Flood Damage Potential

Creek	Expected Annual Damages Existing	Expected Annual Damages Future	Average Annual Equivalent
BIG PAPILLION	$964,900	$1,717,200	$1,193,900
LITTLE PAPILLION	295,900	520,400	344,000
WEST PAPILLION	94,800	220,500	127,400
COLE	54,400	70,900	60,200
HELL	29,600	34,300	31,300

PLANNING OBJECTIVES. The planning objectives used in developing plans for consideration are listed below.

- Reduce existing flood damage potential
- Prevent future damages to the extent practicable
- Obtain 100-year protection
- Reduce FEMA floodway to the channel where possible
- Prevent increases in 100-year discharges that would jeopardize the existing FEMA floodway
- Lessen the remaining damage potential including loss of life
- Develop recreation potential
- Enhance fish and wildlife
- Improve water quality

PLANS DEVELOPED FOR CONSIDERATION. ~~Two previously~~ formulated plans addressed the flood problem in the Papillion Creek basin. One plan was the authorized 21-dam system presented in the 1967 Review Report. The other plan was a modification of the authorized plan — Dams 3A, 10, 15, 18, and 20 — which resulted from a reevaluation conducted during the 1974 to 1979 period. In Public Law 97-88, Congress specifically directed the Corps of Engineers to review these previous plans as a part of this Papillion Creek Restudy. This review is nearing completion and our preliminary analysis is presented in the following paragraphs.

There are no feasible plans that will totally eliminate the flood problem in the Papillion Creek basin. There are, however, three marginally feasible alternatives that would resolve part of the flood problem: (1) a nonreservoir plan; (2) the authorized plan with revisions, hereinafter referred to as the revised authorized plan; and (3) a modified authorized plan. These three plans and the no action plan are described below.

Nonreservoir Plan

This alternative consists of various elements other than flood control reservoirs. The specific elements for each major stream are presented in the following paragraphs. The elements essential to all streams that are a part of this alternative are identified in the last portion of this section.

Big Papillion Creek. Improving the UPRR bridge opening would reduce the potential urban damage to development in the area between Fort Street and Q Street from $855,600 to $627,300 annually. Improving the channel between L Street and West Center Road would further reduce the urban damage potential. A 25-, 50-, or 100-year channel would reduce the annual urban damage potential from $627,300 to $390,900, $337,600, or $263,000, respectively. Additional benefits as a result of reduced flood plain fill costs and reduced flood insurance administration costs would also be realized. Additional channel improvement downstream from L Street and/or upstream from West Center Road would reduce the damage potential further; however, it is not economically justified.

Biking and jogging trails could be incorporated into the channel design. These trails would connect several existing recreation areas that are located along the stream.

Little Papillion Creek. About 26 percent of the potential damage along the Little Papillion Creek would be reduced if the UPRR bridge restriction were eliminated. This measure is not economically justified at this time. When the bridge is scheduled for replacement by the UPRR, an opening capable of conveying floods with minimal losses should be incorporated into the design.

West Papillion Creek. There were no economically feasible flood control measures investigated that would reduce the potential damage further than that provided by Dams 18 and 20 and the existing channel. There are no bridges along the West Papillion Creek that add significantly to the urban damage potential.

Cole Creek. Improving the bridge openings at Western Avenue, Seward Street, and Hillside Drive would reduce the potential annual damage between Western Avenue and Maple Street by $15,900 per year. The immediate improvement of these bridges is not economically justified because of the high costs. These bridge openings should be made capable of conveying floods with minimal losses as they are scheduled for replacement by the city of Omaha.

Hell Creek. Opening the restrictions at the UPRR and West Center Road bridges is not economically justified at this time. However, improving the openings to reduce these restrictions at the UPRR and West Center Road bridges should be considered by the UPRR and the city of Omaha when these structures are scheduled for replacement.

Remaining Basin. There may be pressure to develop some of the flood plain areas in the future. When this occurs, the high flood hazard zones should be identified through FEMA Flood Insurance Studies. These areas should be incorporated into the Flood Insurance Program and regulated by the entity that has jurisdiction in accordance with the requirements of that Program. This would ensure that new development is protected from floods up to the 100-year level and is provided a reasonable level of protection from larger floods.

Elements essential to all streams that are a part of this alternative are channel maintenance, continuation of the Flood Insurance Program, and public awareness of the future flood damage potential.

Channel maintenance consists of prohibiting any dumping in the channel and periodic clearing of fallen trees from the channel. Channel maintenance should also consist of clearing all trees from the channel for a distance of 50 feet upstream and downstream from all bridges to prevent debris from reducing the flow capacity.

Participation in the Flood Insurance Program provides the current owners of development in the flood plain with financial security from the effects of flooding. The Flood Insurance Program ensures that any new or additional development is constructed at elevations that would provide protection from a 100-year flood and a reasonable level of protection from larger floods. Therefore, the Flood Insurance Program should be continued on all streams.

Information on the 500-year flood depth and the benefits of elevating improvements higher than the Flood Insurance Program requirements should be incorporated into the Flood Insurance Program permit process. This information would then be readily available to provide to developers who apply for a permit for new development or for substantial improvements to existing development within the flood plain. This information could be adapted to specific locations along any stream and would show the benefits of placing developments above the elevation required by the Flood Insurance Program.

All of the elements of this nonreservoir plan except for some level of channelization between Center Street and L Street and the UPRR bridge improvement on Big Papillion Creek would require local implementation. The elements requiring local implementation would require minimal additional costs and would minimize increases in future flood damage potential; these elements are applicable to all plans considered and are presented in table 2.

Table 2
Plan Elements Requiring Local Implementation

Creek	Element
BIG PAPILLION	Continue Flood Insurance Program Add 500-year Flood Information to Flood Insurance Permit Process Maintain Channel Capacity

LITTLE PAPILLION	Improve UPRR Bridge Opening When Scheduled for Replacement Continue Flood Insurance Program Add 500-year Flood Information to Flood Insurance Permit Process Maintain Channel Capacity
WEST PAPILLION	Continue Flood Insurance Program Add 500-year Flood Information to Flood Insurance Permit Process Maintain Channel Capacity
COLE	Improve Western Ave., Seward St., and Hillside Dr Bridge Openings When Scheduled for Replacement Continue Flood Insurance Program Add 500-year Flood Information to Flood Insurance Permit Process Maintain Channel Capacity
HELL	Improve UPRR and West Center Road Bridge Openings When Scheduled for Replacement Continue Flood Insurance Program Add 500-year Flood Information to Flood Insurance Permit Process Maintain Channel Capacity
REMAINING BASIN	Continue Flood Insurance Program Add 500-year Flood Information to Flood Insurance Permit Process Maintain Channel Capacity

Revised Authorized Plan

The authorized plan consisted of 21 dams for flood control, recreation, fish and wildlife enhancement, and water quality. Dams 11 and 16 have been constructed; Dam 17 has been constructed by a private developer; and Dams 18 and 20 are currently under construction. The cost of the remaining 16 dams would be approximately $120 million.

The 1974 to 1979 plan reevaluation found that only Dams 1, 2, 3, and 4 on the Big Papillion Creek, Dam 10 on the Little Papillion Creek, and Dams 15, 18, and 20 on the West Papillion Creek were economically justified. Our current review has found that Dams 10 and 15 are no longer economically justified. Dams 1, 2, 3, and 4, however, were found to be feasible at the authorized interest rate and would reduce flood damages along the Big Papillion Creek by 67 percent. Additional benefits for reduced flood plain fill costs and for reduced flood insurance administration costs would also be realized. The remaining 16 authorized dam elements may have merit as recreation lakes for public parks purposes or to enhance housing sub-developments. Also, the dams individually could provide substantial flood protection for the flood plain area immediately downstream and a lesser degree of protection to areas farther downstream. The merit of these dam elements, even though part of the authorized plan, is beyond the current implementation potential of the Corps of Engineers.

Thus, the revised authorized plan may consist of Dams 1, 2, 3, and 4 or one or more of these dams in combination with modification of the UPRR bridge and some channelization between Center and L Streets on Big Papillion Creek. In addition, the plan would consist of all the elements of the nonreservoir plan requiring local implementation, as shown in table 2. The cost allocated to the recreation purpose of the four dams is greater than 50 percent (62 percent). This plan, therefore, does not meet the requirements of Public Law 89-72, the Federal Water Project Recreation Act, and can only be implemented if it is specifically exempted from Public Law 89-72 by Congress. If the recreation development at the four dams were reduced so that the cost allocated for recreation would be less than 50 percent in order to comply with Public Law 89-72, this plan may be economically feasible at the authorized interest rate (3.25 percent) but is not economically feasible at the current interest rate (8.125 percent). Justification at the current interest rate might be improved by excluding one or more of the dams and including downstream channel improvements and/or modification of the UPRR bridge.

The four-dam element of the revised authorized plan would provide 1,900 acres of recreational waters, 1,800 acres of recreational lands, and 2,400 acres of wildlife management lands.

Modified Authorized Plan

The modified authorized plan consists of Dam 3A; this dam was recommended in 1975 during the plan reevaluation in lieu of Dams 1 through 9 of the authorized plan. Dam 3A would reduce the potential average annual flood damage along Big Papillion Creek by 75 percent. Additional benefits for reduced flood plain fill costs and for reduced flood insurance administration costs would also be realized. In addition, the plan consists of all the elements of the nonreservoir plan requiring local implementation, as shown in table 2. The cost allocated to the recreation purpose of Dam 3A is greater than 50 percent (57 percent). Thus, the plan does not meet the requirements of Public Law 89-72, the Federal Water Project Recreation Act, and can only be implemented if it is specifically exempted from Public Law 89-72 by Congress. If the recreation development were reduced so that the cost allocated for recreation would be less than 50 percent in order to comply with Public Law 89-72, Dam 3A would not be economically feasible.

The Dam 3A element of the modified authorized plan would provide 1,500 acres of recreational waters, 1,650 acres of recreational lands, and 1,000 acres of wildlife management lands. The purchase of 1,000 acres of additional lands for recreation would also be a part of the Dam 3A element.

No Action Plan

If no action is taken, existing damages will remain unchanged and the only element to minimize increases in future flood damages would be continuation of the Flood Insurance Program. Costs of this plan include fill costs and administration costs of the Flood Insurance Program.

SUMMARY. Table 3 contains preliminary cost estimates for each plan. The costs presented for the revised authorized plan are for Dams 1, 2, 3, and 4 only. Various combinations of one or more of these dams plus modification of the UPRR bridge and downstream channel improvements would lessen the costs. Opportunities such as this will be discussed at the PWCC meeting to determine the merit and acceptance of these combinations.

Table 3
Plan Cost Comparison — Big Papillion Creek

Plan	Investment Costs			Annual Non-Federal O & M[1]
	Total ($000)	Federal ($000)	Non-Federal ($000)	($000)
NONRESERVOIR PLAN				
Rebuild UPRR bridge opening, channelize L to Center Streets w/biking and jogging trails, and a), b), or c)				
a) 100-year channel	$11,400	$ 7,400	$ 4,000	$ 20
b) 50-year channel	7,700	5,000	2,700	20
c) 25-year channel	6,300	4,100	2,200	20
REVISED AUTHORIZED PLAN				
Dams 1, 2, 3, and 4	59,400	55,800	3,600	900
MODIFIED AUTHORIZED PLAN				
Dam 3A	45,400	25,600	19,800	660
NO ACTION PLAN				
Fill costs and FEMA administration costs	7,420	20	7,400[2]	0

[1] Operation and Maintenance

[2] Present capitalized value of an annual cost of approximately $600,000 per year

STATEMENT OF BOARD OF EDUCATION, BENNINGTON (NEBR.) PUBLIC SCHOOLS

There is currently a study underway to determine the best of three alternatives to minimize flood damage in the Big Papillion Creek flood plain. Of the three, the channel improvement alternative meets the criteria of having a favorable cost-benefit ratio of at least 1 to 1 or better. Neither Dam 3A nor the proposed alternative of Dams 1, 2, and 3 meets that requirement.

The Board of Education of the Bennington Public School District has a number of concerns regarding which of the proposed plans is to be implemented. Should Dam 3A be built, there would be a fifteen hundred acre reservoir less than three-fourths mile upstream from our school. In the event of structural failure, 600 lives of students and school personnel would be endangered. Also, because our school is situated on the flood plain, seepage from the reservoir and a rise in the ground water level would cause serious structural problems.

The Dam 3A project would remove several square miles of property from our taxable valuation. Our district is quite small, about 32 square miles, and already has the lowest valuation per student in our county. Therefore we certainly cannot afford any loss of tax revenue.

An independent review board composed of several world-renowned hydrology engineers, appointed in 1976 by then Governor James J. Exon, concluded that the effectiveness of dams located so far upstream had been greatly overstated by the Corps of Engineers.

As a Board of Education we are greatly concerned with providng a safe and tranquil environment in which to educate our children and we want to support the plan which we feel would best protect that area in Omaha which now has the greatest potential for flood damage.

For the social and economic reasons stated, we can support only the plan to channelize the Big Papillion Creek between L Street and West Center Road and urge your committee to approve the channel improvement plan and to fund it. If this can be done, it will end years of controversy and concern in finding a solution to this problem.

STATEMENT OF ERIC L. KNUDSEN, MAYOR, WASHINGTON, NEBR.

The impact of Dam 3A on the village of Washington can only be described as shockingly disastrous. Washington, an incorporated village having literally picked itself up by its bootstraps after the searing drouth of the 1930's, can now boast of many new homes, a population increase of over 200 per cent, a new state spur into town, a new fire department, and a healthy increase in business activities. We are a growing town.

Our biggest and most important asset is, of course, our young people who, liking what we have in Washington, decided to build their homes and raise their families in a small town with an excellent school system free of many of the problems associated with living in many of the larger cities.

Dam 3A would literally drown out our town--our tax base to operate our school, our fire department, and many places of business as well. The silt, algae and plankton growth would soon make the lake unfit for water recreation. Farm chemicals could well kill off the fish if there were any.

The Corps of Engineers speaks of lost tax revenues but forgets to mention the much greater loss of gross wealth that is produced each year in our agricultural Papio Valley--new wealth that supports many people on the farms and in our cities as well--in turn producing additional tax money for local, state and federal governments.

Dam 3A would destroy all this, would seriously damage our way of life in the Papillion Valley socially, morally and financially. Washington and Douglas Counties, the village of Washington, Bennington, Kennard, Arlington and Blair will all be hurt, and for what? Flood control? No!

The Corps of Engineers says it can build Dam 3A twelve miles upstream from Omaha, narrow the flood plain, and give Omaha flood protection. The truth is, the people of Omaha are being set up--a sitting duck for a Rapid City, South Dakota type disaster, if the rains fall below the dam as they did at Rapid City. The count there was 239 people dead, and a repair job costing millions. Remember?

It would surely be much better for all if we consider channel improvement and green areas on the Big Papillion Creek through Omaha and Sarpy County. The Corps of Engineers says this alternative would protect Omaha and Sarpy County from storms in excess of the 100-year rains.

Buying land on the lower flood plain to keep out development, and turning this into recreation areas would be much more sensible. It was done in Rapid City after the flood. It has been done in other areas. It is being considered for the West Papillion Creek. Why not the Big Papio? Dam 3A destroys so much and promises so little.

Thinking people will move out of the flood plain, or they can be and should be moved out before a flood occurs. This could not be any more immoral than moving farm families off their productive farms to make room for a dam or dams of questionable value.

I say questionable because if the dams really were the answer, the Corps of Engineers would not be constantly changing its plans on the Papio dams. Apparently engineering is no longer an exact science; rather, it is the whim of civilian employees of the Corps as they are influenced by greedy developers and a few pork-barrel politicians. Urban and industrial development can grow and prosper equally well above the 100-year flood line, and without flood-proofing or flood insurance of buildings, and without Dam 3A.

I believe our Papio Valley would be a very good place to cut some of the fat out of federal spending by the Corps of Engineers. In the long run, channel improvement and green areas for recreation in the flood plain will provide much better flood protection.

STATEMENT OF LLOYD SCHEVE, BLAIR, NEBR.

We have followed the Papillion Creek Watershed plan now for 20 years and feel it is time for us to take a position.

In 1981 when an Independent Review Boards findings concluded that Dams gave very little flood protection, compared to channelization, farmers in this area were greatly relieved.

However, recently media hype has indicated that Dams 1, 2, and 3 or 3A are again being given consideration because of recreational source pressures.

I think it is important now, in your position, to keep this project in perspective. The plan was conceived for Flood Control purposes and this intent should be followed through.

Tax dollars in this rural community are hard to come by. By taking productive tax earning farm ground off the tax roles will only increase the burden on other taxable acres.

Channelization is the only plan that meets the cost-benefit requirements.

I ask for your time and consideration in this vital matter.

STATEMENT OF VICTOR VANARSDEL, PRESIDENT, BENNINGTON (NEBR.) LIONS CLUB

The Bennington Lions Club is a civic organization concerned with service to our community. We are fearful of the long lasting and detrimental effects to our town and surrounding community should either of the flood control plans to build dams on the Big Papillion Creek be implemented.

The safety of our citizens and their property, especially our school, would be in jeopardy should structural failure occur. Also a considerable amount of tax base would be removed from our school district should Dam 3A be built. The disruption of people's lives in losing their farms and having to relocate or change occupations would be catastrophic. The adverse economic and social impact on our community would be immense. A severe burden would be placed on our police and volunteer fire departments to provide protection.

The Nonreservoir Plan to channel a part of the creek through the area where the most damage occurs would be most satisfactory. It is the only plan with an acceptable cost-benefit ratio and would cause the least and most easily remedied impact on the economic and social environment of the areas affected.

A solution to the long-existing problem needs to be developed and we feel this is the only acceptable plan.

We urge you and the members of your committee to recommend approval and funding of the Nonreservoir Plan to minimize flood damage in the Big Papillion flood plain.

STATEMENT OF JIM KNAG, CHAIRMAN, WASHINGTON COUNTY (NEBR.) BOARD OF SUPERVISORS

Once again, we are contacting you to express our concern in regard to the Flood problems and Proposed Flood Control Projects relating to the Papillion Creek Basin at Omaha, Nebraska.

In 1981, a group of interested organizations and political people went to Washington, D.C. to the Appropriations Commitee, requesting funding to have a study done on the Papillion Creek Watershed for a non-structural alternative plan. At that time, Washington County helped with the funding for an Independent Engineering Review Board to do this study.

The findings of the Independent Review Board indicated that the proposed dams gave very little, if any, flood protection and we were very pleased to hear that further study was to be made for protection of a non-structural nature.

However, recently, we have read in the newspaper and have heard other reports that the Corp of Engineers is considering bringing Dams 1,2,3 or 3A, back into the planning. This is of great concern to us and we wish at this time to go on record as being very much opposed to the consideration of these plans, as they are not in agreement with our request of 1981.

It is our strong feeling that the plan for channelization is the only plan that meets all of the cost-benefit requirements.

Therefore, we again wish to go on record that we, the County Board of Supervisors of Washington County, Nebraska, are opposed to the plans for Dams 1,2 and 3 or Dam3A.

Thank you for your urgent consideration in this matter.

STATEMENT OF LLOYD A. TODD, CHAIRMAN, KENNARD (NEBR.) BOARD OF TRUSTEES

As Chairman of the Board of Trustees for Kennard Nebraska, I am writing to you to voice my opposition over the construction of dams numbers 1, 2, 3, or 3A in the Papillion Basin.

I have talked to people in and around the village of Kennard and I find overwhelming opposition to these dams. It is our consensus that the construction of these dams would pose an undue hardship on the people of Washington County without providing necessary flood protection to the people of Douglas County.

With the current Federal budget we now have, all expenditures need to be weighed very carefully as to the economic benefit and I respectfully submit that the cost benefits ratio of the Papillion Basin project is very unfavorable.

The alternate we offer as the only economically feasible approach to flood protection, is channelization.

I thank you for your time and your consideration of this matter.

STATEMENT OF WASHINGTON (NEBR.) COMMUNITY CLUB

The Washington Community Club of Washington, Nebraska in Washington County greatly opposes the building of the Dam 1, 2, 3 and 3A. We feel that eliminating the town of Washington and the school would not benefit anyone. The school is very beneficial in that it gives the children a solid background on a personal level. The town is a good place to raise children and breaking this town up would mean that you would uproot many families that came to Washington to build a good foundation of living. We have many children involved in community projects such as 4-H, church groups, baseball, wrestling, and other similar activities.

We oppose the recreational aspect of the dams, as it would change our livelyhood, and we feel there are already enough recreation areas around Omaha not being used.

The corp of engineers plan for channelization is the only plan that meets all requirements.

Please THINK of the peoples lives before making such disruptive decisions.

STATEMENT OF WILLIAM KOHLHAASE, MAYOR, ELKHORN, NEBR.

In 1981, an ad hoc committee formed by Congressman Hal Daub of people representing different segments of government, organizations, etc., presented testimony before the Appropriations Committee asking for money to have a study done on the Papillion Creek and Tributaries for a non-structural alternative to the original 21 dam plan for the watershed. We were not included in this committee, even though the west branch of the Papillion Creek goes right through our town.

We have followed this controversy since the beginning. We had read Prof. Rogers' statement that dams were of little value; Dr. Ven Te Chow's report affirming Dr. Rogers' findings, and finally the Independent Review Board indicated that the proposed dams gave very little flood protection. We were then very pleased to hear that these people were asking for a plan of protection that was non-structural.

We now have read in the newspapers and have heard that the Corps of Engineers is considering bringing Dams 1, 2, and 3 or Dam 3A back into the planning. We are contacting you to express our concern and want to go on record as being very much opposed to these plans. There was a plan for channelization being considered and we want to stress this is the only plan that could possibly meet all requirements.

In summarizing, we wish to go on record as opposing any consideration being made for building Dams 1, 2, and 3 or Dam 3A and that we believe channelization is the best plan for all concerned.

STATEMENT OF WILLIAM BOHN, CHAIRMAN, BENNINGTON (NEBR.) BOARD OF TRUSTEES

The Board of Trustees of the Village of Bennington, Nebraska is concerned with providing the best solution to minimizing the potential flood damage in the Big Papillion Creek flood plain.

Three plans have been developed for consideration by the Papio Watershed Coordinating Committee (PWCC). According to a fact sheet issued by the U. S. Army Corps of Engineers in November, 1983, the PWCC was to have tentatively selected its preferred plan by the end of December, 1983, for submittal to the Corps. A fact sheet was to have been published in February, 1984, to present this information.

Because of the unexplained delay, we are unable to testify in favor of an approved plan. Therefore we urge you to approve and provide funding for the plan we support, the Nonreservoir Plan. Both the Revised Authorized Plan and the Modified Authorized Plan would have a considerably unfavorable impact on the economic and social environment of our town and the surrounding community. We feel that the Corps of Engineers has overstated the amount of flood protection provided by these plans when, on their computer module, they distribute a severe storm uniformily over the whole watershed. Realistically, storm cell centers are generally only a few miles in diameter.

The Nonreservoir Plan would provide almost complete protection for that area of Omaha where the majority of damage would occur and provide some recreation at a small fraction of the cost of either of the other plans. In addition, the Nonreservoir Plan would have little adverse effect on the environment that could not be easily corrected.

The fact that neither of the reservoir plans meets the requirements of Public Law 89-72 is further evidence that the Nonreservoir Plan should be approved and funded.

We urge your approval of the Nonreservoir Plan as the most logical of the plans so that a solution to this long-standing problem can be concluded.

STATEMENT OF ALVIN J. ANDERSEN, PRESIDENT, KENNARD (NEBR.) RURAL FIRE DISTRICT

The construction of either Dams 1, 2, and 3 or Dam 3a would affect the Kennard Rural Fire District which provides services for the portion of Washington County lying in the Big Papillion Creek drainage area from the Douglas County line northward to within one mile of Highway 91.

All of the land which would be used for Dams 1, 2, and 3, totaling 6,321 acres, lies in the Kennard Rural Fire District and would cut the area being served into several segments.

The acreage in Washington County which would be used for Dam 3a would be approximately 80 per cent of the total land for the project, 5,150 acres. This would divide the Fire District into two parts south of Kennard.

1. Loss of Revenue

   The land used for the Project would no longer be on the tax roles, diminishing the revenue for the Fire District. The cost of operation of the Fire District would remain the same. The taxpayers in the remainder of the district would have their taxes increased to provide the necessary funds.

2. Loss of Access

The reservoirs of Dams 1 and 2, if built, would apparently close roads for two or three miles of their length north and northwest of Kennard. Dam 3 would close all east-west roads for five miles from Washington to Kennard.

With these roads closed, the fire or rescue units often would not have direct routes to answer calls but would have to go miles around the Project area, thus losing valuable minutes. Company B Unit, which is stationed in and manned by residents of Washington, would certainly be handicapped in reachin places to the east on the other side of the Project.

3. Loss of Unit

If Dam 3a were built, Company B Unit of Washington would be lost because of loss of personnel and of the station there. This unit helps serve the entire Fire District. Its loss would place an additional burden on the Kennard Unit which would have the entire area and additional distances to service alone. The Kennard Unit is already dangerously short of personnel during the regular work day.

4. Added Responsibilities of Rescue Unit

The recreation areas which would be created would add responsibilities to the local rescue units because of increased traffic, boating and swimming. The Rescue Units are not trained or equipped to handle boating and drowning incidents. Like the much-larger Blair, Nebraska, Department, it would be necessary to rely on Mutual Aid from Council Bluffs or Omaha to obtain equipment, scuba divers, and specially-trained personnel to handle water rescue work, if needed. This would be a matter of much concern to us.

The possible construction of these dams is a matter of grave concern to the members of the Kennard Volunteer Fire Department and the Directors of the Rural Board for the reasons listed. Plans I and II for this Project will also create economic and social problems for us and our community as families are displaced, farms, homes and businesses are lost, and all other community relationships are affected.

Statement of Cozy Corner Extension Club, Kennard, Nebr.

We oppose Dams #1, 2, 3, and/or 3A, because of the adverse effects they will have economically and socially on the farmers and businesses in Douglas and Washington Counties.

We offer channelization as the only economically feasible alternative to these dams.

Thank you for your consideration.

Statement of Cloverleaf Camp No. 1132, Royal Neighbors of America, Kennard, Nebr.

We oppose Dams #1, 2, 3, and/or 3A, because of the adverse effects they will have economically and socially on the farmers and businesses in Douglas and Washington Counties.

We offer channelization as the only economically feasible alternative to these dams.

Thank you for your consideration.

Statement of Grace United Methodist Church, Kennard, Nebr.

We oppose Dams #1, 2, 3, and/or 3A, because of the adverse effects they will have economically and socially on the farmers and businesses in Douglas and Washington Counties.

We offer channelization as the only economically feasible alternative to these dams.

Thank you for your consideration.

Statement of Bennington (Nebr.) Over 60 Center

We oppose Dams #1, 2, 3, and/or 3A, because of the adverse effects they will have economically and socially on the farmers and businesses in Douglas and Washington Counties.

We offer channelization as the only economically feasible alternative to these dams.

Thank you for your consideration.

STATEMENT OF ST. JOHN'S LUTHERAN CHURCH COUNCIL, BENNINGTON, NEBR.

We, the members of the Church Council of St. John's Lutheran Church of Bennington, Nebr., hereby express strong disfavor to the construction of the dams in Washington and Douglas Counties. We are especially opposed to the construction of dams #1, 2, 3 and/or 3A. We have various and sound reasons for objecting to these projects. Will you please give serious consideration and hearing to the voice of those who reside in this area that is being affected?

STATEMENT OF RAY C. LOGEMAN, VICE PRESIDENT, COMMUNITY ACTION, BENNINGTON, NEBR.

We are opposed to Dams #1, 2, 3, and/or 3A, because of the adverse economic and social effects they will have on the people of our community in the Douglas and Washington County area.

There are other alternatives presented by the Corps of Engineers which would provide flood protection and we feel channelization would be the most economically feasible alternative.

Thank you for your consideration.

STATEMENT OF THE AMERICAN LEGION POST 266, BENNINGTON, NEBR.

Because of the adverse economic and social effects to the people of our community, especially the farmers and businesses in Douglas and Washington Counties, we are opposed to Dams #1, 2, 3, and/or 3A. Also, the Bennington Public School would be located too close to Dam 3A.

The Corps of Engineers has offered other alternatives to these dams and we feel channelization as the most economic alternative.

Thank you for your consideration.

STATEMENT OF JOSEPH R. BOUSLAUGH, FIRE CHIEF, WASHINGTON (NEBR.) VOLUNTEER FIRE DEPARTMENT

The Washington Volunteer Fire Department hereby goes on record to oppose any dam construction in the Washington County area due to the fact that we would lose valuable taxes when land is taken for dam construction.

Also, dams would increase the needs for water rescue training. We do not have the money, manpower, or time, since we are a volunteer organization.

Dams would make accessibility to the east of Washington almost impossible.

We want to thank you for considering our point of view on this subject and hope you will consider us when deciding on dam construction in the Washington County area.

STATEMENT OF LLOYD A. TODD, COMMANDER, AMERICAN LEGION POST 366, KENNARD, NEBR.

I wish to go on record as opposing dams numbers 1, 2, 3, and/or 3A in the Papillion Basin.

The adverse social and economic impact on Washington County would not justify the expense of the dams. I would suggest that channelization is the most feasible approach to flood protection in this instance.

I thank you for your time and consideration in this matter.

STATEMENT OF MRS. BILL HARPER, KENNARD, NEBR.

I am writing in regards to Dams #1, 2, 3, and/or 3A proposed for Washington and Douglas Counties in Nebraska. I feel these dams should not be built because of the adverse effect they would have economically and socially on the farmers and businesses in our counties.

We offer channelization as the only economically feasible alternative to these dams.

Thank you for your consideration.

STATEMENT OF LARRY J. PAVEL, BLAIR, NEBR.

We oppose Dams #1, 2, 3, and/or 3A, because of the adverse effects they will have economically and socially on the farmers and businesses in Douglas and Washington Counties.

We offer channelization as the only economically feasible alternative to these dams.

Thank you for your consideration.

STATEMENT OF RICHARD M. WARDELL, BLAIR, NEBR.

We oppose Dams #1, 2, 3, and/or 3A, because of the adverse effects they will have economically and socially on the farmers and businesses in Douglas and Washington Counties.

We offer channelization as the only economically feasible alternative to these dams.

Thank you for your consideration.

STATEMENT OF JAMES P. TAYLOR, BLAIR, NEBR.

We oppose Dams #1, 2, 3, and/or 3A, because of the adverse effects they will have economically and socially on the farmers and businesses in Douglas and Washington Counties.

We offer channelization as the only economically feasible alternative to these dams.

Thank you for your consideration.

STATEMENT OF FIRST LUTHERAN CHURCH, BLAIR, NEBR.

We oppose Dams #1, 2, 3, and/or 3A, because of the adverse effects they will have economically and socially on the farmers and businesses in Douglas and Washington Counties.

We offer channelization as the only economically feasible alternative to these dams.

Thank you for your consideration.

STATEMENT OF BOB WOODHOUSE, BLAIR, NEBR.

We oppose Dams #1, 2, 3, and/or 3A, because of the adverse effects they will have economically and socially on the farmers and businesses in Douglas and Washington Counties.

We offer channelization as the only economically feasible alternative to these dams.

Thank you for your consideration.

STATEMENT OF WILLIAM J. GUTSCHOW, SHERIFF, WASHINGTON COUNTY, NEBR.

We oppose Dams #1, 2, 3, and/or 3A, because of the adverse effects they will have economically and socially on the farmers and businesses in Douglas and Washington Counties.

We offer channelization as the only economically feasible alternative to these dams.

Thank you for your consideration.

STATEMENT OF M. STANLEY JENSEN, MAYOR, BLAIR, NEBR.

We oppose Dams #1, 2, 3, and/or 3A, because of the adverse effects they will have economically and socially on the farmers and businesses in Douglas and Washington Counties.

We offer channelization as the only economically feasible alternative to these dams.

Thank you for your consideration.

STATEMENT OF JAMES WILCOX, PRESIDENT, KENNARD (NEBR.) VOLUNTEER FIRE DEPARTMENT

We the members of the Kennard Volunteer Fire Department feel we are not properly equipped to handle a lake area should a water accident occur. The Dams #1, 2, 3 and/or 3A would take away 6,000 acres of taxable land which we depend on for the funding of our fire department.

We ask that you would consider channelization as an alternative answer.

Thank you.

STATEMENT OF PHYLLIS JOHNSON, PRESIDENT, KENNARD (NEBR.) FIRE AUXILIARY

We the members of the Kennard Firemen Auxiliary oppose the building of the Dams #1, 2, 3 and 3A because of the adverse effects on our community socially and economically.

We also are opposed because of all the acres of good Nebraska farmland that will be wasted needlessly. We need our farms for future generations and our food supplies. The effect on our tax dollars will be astronomical.

These dams also would enclose Kennard on three sides and allow no space for expansion. These dams would also knock out our cemetery lands.

We offer the river channelization as the only feasible alternative economically and socially to these dams.

Thank you for your time and consideration on our behalf.

STATEMENT OF DWAYNNE MAZOUR, BLAIR, NEBR.

We oppose Dams #1, 2, 3, and/or 3A, because of the adverse effects they will have economically and socially on the farmers and businesses in Douglas and Washington Counties.

We offer channelization as the only economically feasible alternative to these dams.

Thank you for your consideration.

STATEMENT OF PAT SCHREFFLER, EXECUTIVE DIRECTOR, BLAIR (NEBR.) CHAMBER OF COMMERCE

The Blair Chamber of Commerce Legislative Committee is strongly opposed to Dams #1, 2, 3 and/or 3A in the Papio Natural Resources District. The 5,000 acres that would be taken out of production would have an adverse economic impact on Washington and Douglas Counties as well as a direct loss to the farmers themselves.

We find it hard to understand why excess money should be spent to build dams when a better and less expensive alternative is available.

We firmly believe that channelization is the most economic and most feasible way to handle the problem.

Please take these comments into consideration when making your decision.

STATEMENT OF BLAIR (NEBR.) FIRE DEPARTMENT

We oppose Dams #1, 2, 3, and/or 3A, because of the adverse effects they will have economically and socially on the farmers and businesses in Douglas and Washington Counties.

We offer channelization as the only economically feasible alternative to these dams.

Thank you for your consideration.

STATEMENT OF DANIEL L. MAGILL, BLAIR, NEBR.

We oppose Dams #1, 2, 3, and/or 3A, because of the adverse effects they will have economically and socially on the farmers and businesses in Douglas and Washington Counties.

We offer channelization as the only economically feasible alternative to these dams.

Thank you for your consideration.

STATEMENT OF TOM LIPPINCOTT, BLAIR, NEBR.

We oppose Dams #1, 2, 3, and/or 3A, because of the adverse effects they will have economically and socially on the farmers and businesses in Douglas and Washington Counties.

We offer channelization as the only economically feasible alternative to these dams.

Thank you for your consideration.

STATEMENT OF WILLIE ARP, BLAIR, NEBR.

We oppose Dams #1, 2, 3, and/or 3A, because of the adverse effects they will have economically and socially on the farmers and businesses in Douglas and Washington Counties.

We offer channelization as the only economically feasible alternative to these dams.

Thank you for your consideration.

STATEMENT OF JOHN R. WARREN, BLAIR, NEBR.

We oppose Dams #1, 2, 3, and/or 3A, because of the adverse effects they will have economically and socially on the farmers and businesses in Douglas and Washington Counties.

We offer channelization as the only economically feasible alternative to these dams.

Thank you for your consideration.

STATEMENT OF RIVERVIEW GRANGE 392, BLAIR, NEBR.

We oppose Dams #1, 2, 3, and/or 3A, because of the adverse effects they will have economically and socially on the farmers and businesses in Douglas and Washington Counties.

We offer channelization as the only economically feasible alternative to these dams.

Thank you for your consideration.

STATEMENT OF THE ROTARY CLUB, BLAIR, NEBR.

The Rotary Club of Blair opposes the funding of Papio Dams #1, 2, and 3A because of the ruinous effect on the social and economic structure of the farms and businesses in Douglas and Washington Counties in Nebraska.

We feel the dams will provide little or no flood control or protection for the area. Channelization is the economically feasible solution.

Consideration of these points is appreciated.

STATEMENT OF EMMAUS LUTHERAN CHURCH, KENNARD, NEBR.

We oppose Dams #1, 2, 3, and/or 3A, because of the adverse effects they will have economically and socially on the farmers and businesses in Douglas and Washington Counties.

We offer channelization as the only economically feasible alternative to these dams.

Thank you for your consideration.

PROJECT HISTORY

Mr. HOIER. In 1981, a group of interested governmental agencies and private organizations asked the Appropriations Committee for money to have a study done by the Corps of Engineers on Papillion regional watershed for nonstructural plan as alternative to dams as a vehicle for flood control in the Omaha area. Money was appropriated. In November 1983, the Corps this last fall came up with four plans. Since that time, only three of these plans have been considered. No. 1, the nonreservoir plan which consists of rebuilding the Union Pacific Railroad bridge and channelization; No. 2 is revised authorized plan—dams 1, 2, 3, and 4, or one or more of these dams; No. 3, the modified authorized plan, dam 3A; plan No. 4 was the no action plan, and since this time, this plan has been dropped from consideration.

Plan No. 2, the revised authorized plan, or dams 1, 2, 3, show 56-percent flood protection for their area that is most vulnerable. Fifty percent of this protection is due to the fact that plan No. 1, the nonreservoir plan, has to be furnished by local entities of government. This leaves 6 percent actual flood control from this plan.

Plan No. 3, the modified authorized plan, or dam 3A, shows a 75-percent flood figure. Again, 50 percent of this protection is due to plan No. 1, a nonreservoir plan being added by local entities in government again. This leaves 25-percent protection being provided by dam 3A. We dispute even the 25-percent flood protection. Dam 3A is 1 mile below dams 1, 2, and 3 that are planned in No. 2. Plan No. 2 shows 56-percent protection. How can the Corps, we figure, can come up with 19 percent more protection in such a short distance. Dam 3A is 11 miles from the most vulnerable areas. Dams 1, 2, and 3 are 12 miles above the same area. Two miles from below the vulnerable area is the Sarpy County line. The Corps shows no—zero—flood protection at that area. I am not an engineer, but these figures are an insult to a person with any intelligence.

Plan No. 1, the nonreservoir plan, consists of channelization to L Street to West Santa Road and, of course, like I mentioned, the railroad bridge. This is approximately 1½ miles. This is the problem area, or the vulnerable area, that I spoke of before. This plan shows a cost by the Corps figures of $11 million; the Federal share is $7 million. The local share, of course, would be $4 million. This is for a 100-year protection or 200-year rain.

Plan No. 2, the revised authorized plan, 1, 2, and 3, again, show a cost of $39 million. The Federal Government picking up most of this cost at a 3¼-percent interest rate because of the original 1968 authorization. Sixty-two percent of the No. 2 plan is for recreation.

Plan No. 3, the modified authorized plan, or dam 3A, costs $45 million. The Federal share is $25 million and the local entities cost is $19 million, almost $20 million. This plan shows 57-percent recreation. The last public information fact sheet released by the Corps of Engineers, November 1983, will verify and help to explain what I have been trying to explain to you. There is a copy attached to my written testimony.

In summary, we know that we are premature in the fact that the Papillion Watershed Coordinating Committee, set up by Congressman Daub, has not at this time yet voted on any of the plans being considered by the Corps. They were to be decided in December 1983 and for some reason that has been a holdup. But we want to go on record as stating that we are opposed to any consideration for funding being given to a plan that is not nonstructural in nature. It is with great reluctance that some of our board members agreed to help get dams 18 and 20 back onto the planning table in 1980. It now seems that, perhaps, this was a mistake. We would never have appeared before the Appropriations Committee asking for funds for 18 and 20 in 1980 or for funds for a study in 1981 if we had not been given the assurance that there would be no dam in any of the Corps' design for flood control in the Papillion watershed. PVPA, that I am here in behalf of, feels that with our Government showing the deficit that it does, we want to go on record as stating that we oppose any consideration for funding being given to any plan that is not economically feasible. This does not and will not have local support and most importantly provide little, if no, flood protection for the vulnerable area in the watershed.

We have with us—I have turned into your staff—numerous letters from concerned people who feel the same as we do in that area.

Senator MATTINGLY. Is the restudy you spoke about progressing in a satisfactory manner?

Mr. HOIER. Not according to us. We asked for nonstructural measures and two of the three plans are dam projects. We stated—and the Congressman also stated, and I have a copy of that in our written testimony—that we asked for nonstructural all the way and for some reason we got two dams as alternatives. We feel that what it has done is created activity in the Omaha area that had kind of been set aside. The dams won't do the job, in other words. We proved that by an independent review study in 1975. We spent considerable amount of money to do this. So it is kind of a thorn in our side that they are restudying what has proved not right. Their figures, again, in this new fact sheet as of November 1983, say the same thing.

Senator MATTINGLY. Sounds like the Government, doesn't it?

Mr. HOIER. Somebody messed up somewhere.

Senator MATTINGLY. Not in this place. [Laughter.]

Mr. Holstein, do you have anything to add?

Mr. HOLSTEIN. I might say this will be taking money away from the local entity government providing channelization of the lower dams. This will be mostly out of the NRD which will take money from terraces, small on-farm dams which would help hold back the silt and will help the water quality. It will take money away if we have dam construction, it will take money away to channelize.

Senator MATTINGLY. We appreciate your comments. Thank you very much.

RANDLEMAN LAKE, N.C.—OPPOSITION

STATEMENTS OF:

R.S. DAVIS, MEMBER, DEEP RIVER CITIZENS COALITION

HON. HAROLD BRUBAKER, NORTH CAROLINA HOUSE OF REPRESENTATIVES

Senator MATTINGLY. Is Mr. Davis, member of the Deep River Citizens Coalition, here?

Ms. Swiggett is not here?

Mr. DAVIS. No, she is not here.

Mr. Chairman, I am R.S. Davis, a member of the Deep River Citizens Coalition. I have submitted to the staff a written statement plus other materials that I would like entered into the record.

Senator MATTINGLY. Without objection, so ordered.

[The statement follows:]

STATEMENT REGARDING THE RANDLEMAN DAM IN RANDOLPH COUNTY, N.C.

In behalf of the Deep River Citizens Coalition and other concerned residents of Randolph and Guilford Counties in North Carolina:

There are many, many citizens of Randolph and Guilford Counties who strongly oppose the Randleman Lake project which is scheduled to be built in our area. Yes, some of our homes are at stake and that is a great concern, but there are many more reasons why we do not believe this dam should be built. Attendance at public meetings, hundreds of names on petitions, letters and mail-o-grams to Congressmen, all confirm the fact—the people do not approve of this project. Big business and industry, we believe, are the forces behind this proposed dam. According to the Constitution of this land, this is the government of the people, by the people, and for the people; therefore, we believe the voices of the citizens should be considered in this matter. Some of the primary concerns of the people are:

That a thorough study be made of the population growth and actual water needs of the area. (The figures of the Corps of Engineers which were projected in the last available design memorandum have been proven to be inaccurate with latest census figures.)

That greater reduction or elimination of lands for recreation be demanded if it is determined that the lake should be needed for water.

That extensive studies be conducted to determine the most efficient and least expensive method of providing needed water.

That water conservation measures be put into practice in the cities supporting the project because they claim they need the water. Certainly that wasteful water practices be corrected. (The Greensboro Daily News, October 4, 1983, reported that a Greensboro city water pipe at the corner of Hillcrest Drive and Fairmont Street gushed water into the street continually for about a month at the rate of about 15 gallons per minute, supposedly to flush the lines.)

That steps be taken to assure that the water in Deep River will be safe for drinking and recreation if the dam is built.

That unbearable tax burdens not be levied on the citizens of the area who will have to pay for this project.

That sincere consideration be given to the displaced persons, whether they can find suitable jobs, will the emotional strain of relocating destroy these citizens, if prime farmland and farm production should be devastated, and if historic sites and good solid communities which are a part of America's heritage should be sacrificed.

Many citizens are convinced that growth is not always good. In many areas today the air is too polluted to breathe, the water has so much industrial waste and sewage that it cannot be consumed by man or beast, and the trees and other growing plants are dying because of toxic wastes. Still more serious is the fact that people are dying as a result of man's greed and passion for growth. Various environmental groups have issued statements opposing the Randleman Lake.

The Conservation Council of North Carolina said this in opposing the Randleman Dam project: "Great sacrifices in the quality of life have been made in order to accommodate these rapid urbanizations (speaking of Charlotte and Atlanta). They do not establish a desirable pattern for Guilford County's future."

We, the citizens of Randolph and Guilford Counties, who are opposed to the Randleman Lake project, appeal to you, our legislators, to carefully consider this matter. We ask that you consider the rights of the people and the quality of life elements that are involved. We particularly ask that you not allow big business and industrial growth to outweigh your concern for the people.

RANDLEMAN LAKE FACT SHEET

Project data

Location: Randleman Lake, a reservoir project of the Army Corps of Engineers, would be constructed at mile 93.6 of the Deep River, 1.8 miles upstream from Randleman, N.C., and at 15 miles south of Greensboro, N.C. The reservoir would cover acreage in Randolph and Guilford Counties.

Authorization: Flood Control Act of 1968.

Total project cost: $159 million.

Non-Federal share (direct):

Water supply	$62,850,000
Operation/maintenance (50 years)	15,570,000
Recreation	15,127,000
Operation/maintenance (50 years)	23,195,000
Flood control	Unknown
Operation/maintenance (50 years)	Unknown

Interest rate: 3.25 percent.

Benefit/cost ratio: 1.4 to 1.

Benefits:

	Percent
Water supply	56.7
Flood control	6.6
Recreation	32.1
Redevelopment	4.6
Total	100.0

Displacements: Acreage, 10,800 acres in 470 tracts; residents, 600 people.

Analysis

Flood Control: Flood damage reduction is 6.6 percent of the total project. Only 2.3 miles of downstream will be flood-free. The small amount of annual flood control benefits attest to the project's minimal downstream impact. No benefits will be realized along the Cape Fear. Alternative investment in flood plain management activities with the State's proposed financial cost for flood control of $3,657,000 will produce more flood damage reduction benefits over time.

Recreation: Recreational facilities at this project likely will attract a substantial number of visitors, but there are alternate lake locations in the region where the State could make investment. There are already eight large reservoirs within an 80-mile radius including the recently completed B. Everett Jordan Lake. Recreation facilities could be developed at one or more locations at a lower cost in dollars and land. The three recreation projects the State now operates on reservoirs recover only 26 percent of annual costs through park fees.

Water supply: The dam would provide 48 million gallons per day of water storage to the cities of Greensboro, High Point, Jamestown, Archdale, Randleman, and Guilford County at a first cost of $62.85 million. Additional costs will be incurred for operation and maintenance, interest on investment, pumping costs, treatment facilities, and delivery systems. The Corps overestimated water demand in the year 2000 in Guilford County by 12 million gallons per day by using inflated population projections. The Corps also overestimated demand in the year 2000 by using a per capita withdrawal rate that did not take into account water recycling by industry or water conservation progress. (Water withdrawal in Greensboro could be reduced by 6.6 million gallons per day by establishing a moderate conservation program.)

Loss of agricultural production: The project area produces 51 million pounds of milk annually, worth $3.5 million. The area also produces at least 270,000 chickens annually, worth $675,000. Total annual farm sales in the project area exceed $4.175 million.

Costs to State and local governments: Most local governments have expressed commitments only to keep open their options on water supply. Most Corps reservoirs in the past have had water supply included only as a minor benefit and a minor cost to the local community. This dam will require an investment likely to be far beyond the capability of these governments. Direct costs without interest exceed $78 million. Indirect costs for delivery and treatment systems may cost another $90 to $100 million, according to local officials.

Alternatives

A moderate water conservation program will buy enough time for local communities to seek less expensive and more suitable non-Federal water supplies. A flood plain management program would also provide significant downstream damage reductions. Recreation facilities may be developed at existing sites, particularly B. Everett Jordan Lake.

ESTIMATE—FINANCING THE RANDLEMAN LAKE PROJECT

The following statement and figures are based on information obtained from the local government commission, in charge of the sale of bonds, a part of the office of the treasurer of the State of North Carolina.

Each city and/or county government which agrees to share in paying for the Randleman Lake project will have to decide how it will pay for its share of that project. Until each government makes that decision, no exact figures can be arrived at for the cost of this project. The following figures, however, give estimates as to the cost per government which has signed letters of intent to participate in the project.

These figures were based on the following conditions: General obligation bonds to be sold; interest rate of 9½ percent (present rates are from 9 to 10 percent); project to be paid for in 22 years (this is the general period of payment for GOB bonds); and level payback plan (equal payments per year).

ESTIMATE BASED ON 1982 FIGURES

City/county	Payback per year			Total payback		
	Principal	Interest	Total	Principal	Interest	Total
Greensboro	$1,486,275	$2,108,151	$3,594,426	$32,698,050	$46,379,316	$79,077,366
Randleman	86,355	122,487	208,842	1,899,810	2,694,714	4,594,524
Archdale	86,355	122,487	208,842	1,899,810	2,694,714	4,594,524
High Point	491,055	696,518	1,167,573	10,803,210	15,323,407	26,126,616
Jamestown	72,675	103,083	175,758	1,598,350	2,267,828	3,866,678
Guilford County	627,285	889,749	1,517,034	13,800,270	19,574,472	33,374,742

NOTE: The above figures were arrived at by using the following percentages per governmental unit involved: Greenboro 32.7 percent, Randleman and Archdale 1.9 percent, High Point 10.8 percent, Jamestown 1.6 percent, and Guilford County 13.8 percent.

Total amount of principal to be paid per year, $2,850,000; total amount of interest to be paid per year, $4,042,475; total overall cost at present rates if paid back in 22 years, $151,634,450; and total interest cost in 22 years, $88,934,450.

[From the Greensboro (N.C.) Daily News, Sept. 27, 1983]

DAMMED-UP QUESTIONS

Congress is about to open the floodgates for the federal dollars that would finance the bulk of the $150 million Randleman Dam project in Randolph and Guilford counties. But before it does, some nagging questions ought to be answered.

Those questions are the same ones raised in a News & Record series on the project a year ago:

Will the Triad grow as fast as the Army Corps of Engineers projects? And will the region thus need the water as soon as estimated? The available evidence indicates that the region's growth will be much slower than the Corps predicted. If that's the case, how much water will we need?

And can that water be provided any other—and cheaper—way? Can a combination of water conservation, deep wells and interbasin transfers do the job more efficiently?

And what about the environmental risks? The Randleman Dam project would include a 3,500-acre reservoir and a 10,000-acre reservation, both offering numerous recreation opportunities. But it would also take thousands of acres of prime farmland and displace hundreds of people who now live along the Deep River. Will the economic benefit of the water outweigh the social costs and agricultural losses?

And finally, what sort of lake will the Randleman project be? Will the water really be usable or, because of industrial and municipal pollution, will it experience the same serious water quality problems of another major lake project, the recently-completed B. Everett Jordan Dam and Lake?

So far, these questions have gone unanswered. Yet Congress seems determined to forge ahead. Why the rush? The project was first planned more than a half-century ago. It wasn't authorized by Congress until 1968. But last week, when U.S. Rep. Ike F. Andrews changed his mind once more and lifted his objection to the project, a House committee approved an appropriations bill to provide the first money for building the dam.

The bill would make it easier for local governments to foot their share of the costs—about $63 million—by allowing them to spread the payments over 50 years rather than during the 8-year construction period. If the full House and Senate agree to that first appropriation, the likelihood is that the Randleman Dam will continue to receive annual increments of federal funds and the dam eventually will be completed.

But at what final cost? The price tag goes up every year. And if the waters of the Deep are as polluted as the experts say, how much more money will taxpayers have to shell out to clean up the river and make sure they aren't financing a huge, inoperable cesspool?

STATEMENT OF KATHY GALLUCCI, SIERRA CLUB, GREENSBORO, N.C.

I regret that I am not able to present my statement in person. Please include this testimony in the official record of hearings on appropriations.

My name is Kathy Gallucci and I completed an analysis of the Randleman Lake Project in May 1983 (attached). This analysis and the official position on the project was adopted by the North Carolina Chapter of the Sierra Club and consequently by the national organization of 350,000 members which is headquartered in San Francisco, California.

The Sierra Club recommends that all federal funds for the Randleman Project be withheld until the project can be restudied. We believe that the U.S. Army Corps of Engineers has overstated population projections and demand for water and has ignored concerns about water quality and the feasibility of alternatives.

The Randleman Lake Project has changed considerably since its authorization in 1968. Its main purpose has shifted from flood control to water supply. The total cost for the project has escalated from $11 million in 1966 to $177 million in 1983. More than half of this amount would come from state and local governments.

Our major concern is the water quality of the Deep River and the proposed impoundment. In the Final Environmental Impact Statement prepared by the U.S. Army Corps of Engineers, the emphasis for monitoring and controlling pollution in the lake has been on point sources. The Corps admits that nonpoint sources of pollution are difficult to measure and may indeed be significant. Since large areas of the watershed are urbanized it is undeniable that there will be contaminants in the drinking water.

Polluted sources should not be used as public drinking water supplies. Since it is virtually impossible to eliminate chemical pollution at the source and technology is not available to monitor and safely treat all the possible hazardous pollutants, we need to draw upon protected sources.

No plans have been implemented to protect the watershed of the Deep River through land-use planning and the monitoring and control of nonpoint source pollution. The quality of the water is marginal at present and will continue to be degraded as development continues. It will present a threat to public health if used as a public water supply.

Nonpoint sources of pollution include pesticides, heavy metals, nutrients, exotic organics, and sediments. Most importantly, since World War II, hundreds of synthetic organic chemicals (SOC's) are being developed every year which eventually find their way into the aquatic environment. As many as 423 SOC's have been found in freshwater, 325 of which were found in drinking water, according to one study.

The Public Health Drinking Water Standards (1962) state that "the water supply should be obtained from the most desirable source which is feasible, and efforts should be made to prevent or control pollution of the source." The Randleman Reservoir is certainly not the most desirable source and it still remains to be proven what is the most feasible.

What about the alternatives? There is no single structural or non-structural alternative to the Randleman Dam. Several must be considered in concert depending on the needs of the area. Local municipalities admit that no official and in-depth studies of the alternatives have been completed.

Conservation has not been considered seriously as a way of extending the present water supply. Studies have shown that 25% of water consumed can be saved with moderate conservation measures, and as much as 50% with more stringent ones.

Smaller reservoirs, built with nonfederal funds, could supply water as the need arises and sites could be selected that are in protected watersheds.

Interbasin transfer, although considered politically impossible at present, has been suggested as an option for this area by several studies completed by the state and federal governments. This alternative could also permit the selection of higher quality water.

The Sierra Club believes that projects that take decades to design and execute should be subjected to reevaluation so that needs are properly met and public monies are wisely spent. We recommend an area-wide water quality study and monitoring of run-off to determine the extent and components of nonpoint source pollution, the implementation of a land-use plan for the purpose of watershed protection, and a restudy of the alternatives.

Thank you for the opportunity to present this testimony.

ANALYSIS OF RANDLEMAN LAKE PROJECT

INTRODUCTION

The Randleman Lake Project, along with the Howards Mill Lake Project, was authorized by Congress in 1968, as part of a water resource development plan for the entire Cape Fear River Basin. These two projects were proposed to partly satisfy the flood control, water supply, water quality, and recreation needs of the area. The Howards Mill Lake Project was subsequently dropped because of lack of demonstrated need.

The Randleman Dam would be located 1.7 miles north of Randleman, North Carolina, on the Deep River. The project would cover 10,000 acres of land in Randolph and Guilford Counties and would yield 48 million gallons per day (MGD).

The Piedmont Plateau Group of the North Carolina Chapter of the Sierra Club sponsored a fact-finding conference on the proposed project on February 15, 1983 in Greensboro. The group had several unanswered questions relating to the project which were submitted to federal, local, and state officials. These questions, pertaining to water quality (nonpoint and point source pollution), water use and population projections, economics, and alternative considerations, were used as the basis for discussion during the conference.

Present at the meeting were Larry Saunders and Richard Jackson from the U.S. Army Corps of Engineers (hereafter referred to as the Corps); John Morris from the Office of Water Resources, North Carolina Department of Natural Resources and Community Development (NRCD); Lee Fleming from the Division of Environmental Management -- Water Quality Section (NRCD); Lindsay Cox, Executive Director of the Piedmont Triad Council of Governments; Ray Shaw, Assistant Director of Public Works, Water and Sewer Operations, Greensboro; and Ron McIrvin, Department of Anthropology, University of North Carolina at Greensboro.

Invited to be members of the panel but not attending were: Assistants to Rep. Ike Andrews (4th District) and Rep. Robin Britt (6th District); Randolph County Commissioners; Guilford County Commissioners; managers for Greensboro, High Point, Jamestown, Randleman, and Archdale; Bob Connor, Guilford County Advisory Board for Environmental Quality; and several water quality experts.

Answers to the presented questions and related documents have been analyzed and the conclusions of the group are presented herewith. The recommendations of the Sierra Club are presented at the end of this report.

PRO AND CON

The proposed Randleman Project is viewed by state and local officials as not only the best way to satisfy future water needs, but some see it as the only viable source in the near future. This is because of the inevitable time delay caused by planning and construction. The water may not be needed for several years, but the project is already designed and ready to be executed, with much bureaucratic red tape behind us. Proponents claim that there is not sufficient time to restudy the project considering the time allotment necessary to get to this point. Concerning the economics of the project, the question for many officials is not "can we afford it" but rather, "can we afford not to build it?"

Nevertheless, several groups have expressed concern over the impacts of the project. The National Wildlife Federation and the North Carolina Wildlife Federation oppose it for several reasons, among them: poor consideration of the alternatives, inadequate conservation attempts, and overstated needs. The Conservation Council of North Carolina urges withholding of federal funds until the alternatives receive further study. The Haw River Assembly questions the use of federal funds to support local municipal growth. An organization of the affected landowners, the Deep River Citizens' Coalition, opposes the project because prime farmland would be taken without adequate justification of need. The Washington-based Coalition for Water Project Review has also declared its opposition to the project. The Guilford County Advisory Board for Environmental Quality is worried about growth and water quality impacts.

The River Conservation Fund (RCF), a national non-profit education and research organization, released their analysis of the project in August, 1982. They concluded that local costs would be too high, downstream water quality would be severely degraded, and that conservation would "buy" time enough for local communities to develop non-federal alternatives.

Perhaps most notably, the Randolph County Commissioners, previously in favor of the dam, decided in 1982 that the price of the project in money and land was too high and withdrew their support.

THE EVOLUTION OF THE PROJECT

The following aspects of the project have changed since its authorization in 1968:

1. Its main purpose has shifted from flood control (primarily a federal concern), to water supply (100% of which is paid by local governments).
2. Population projections were greatly exaggerated by the Corps according to actual 1980 census data and increased future per capita usage has not been justified.
3. The total cost for the project has escalated from $11 million in 1966 to $177 million in 1983. More than half of this amount will come from the state and local governments. Furthermore, between $90 and $150 million would be needed over the life of the project for pumping and treatment, not including finance costs.
4. The New Federalism cost-sharing formula proposes that the local share of the project be paid by the time construction is completed. Formerly, repayment started at the time of initial water withdrawal and was continued over a 50 year period.
5. The benefit-cost ratio (BCR) was calculated with an interest rate of 3.25%, to be 1.4 to 1.0. The Corps is still authorized to use this rate even though it is not realistic (Randleman Conference). The BCR was calculated to be 1.01 to 1.0 with an interest rate of 7.625%. It would surely be unfavorable with the current interest rate of 7.875%. Moreover, the BCR does not take into account the cost of treatment, which may prove to be expensive as the water supply becomes more polluted.
6. The recreational benefits of the project have been reduced, as the citizens in the primary impact area have objected to the taking of land for recreational purposes. (Several similar recreational opportunities are available in the area.)

The U.S. Water Resources Council (1978) states: "Inasmuch as concepts and attitudes change considerably over time, water-resources planning must be a continuing process that uses current data and reflects the desires of the public." Projects that may take decades to design and execute must be subjected to reevaluation so that needs are properly met and public monies are wisely spent.

THE WATER QUALITY DILEMMA

The Deep River is affected by the residential, urban and industrial development in its watershed. According to a report by the Greensboro Daily News: "The problem is circular: Urban growth creates pollution but also the need for more water. A new reservoir creates more growth, and that growth further strains a reservoir's water quality" (Alston, 1982).

In the Final Environmental Impact Statement (FEIS) prepared by the Corps in 1980, the emphasis for monitoring and controlling pollution in the proposed lake has been on point sources. The sewer bypass will help to improve the water quality, although it is only a stopgap measure. However, the Corps admits that nonpoint sources of pollution are difficult to measure and may indeed be significant (General Design Memorandum, 1980).

Nonpoint source pollution contains nutrients, pesticides, sediments, exotic organics, and heavy metals (Black, 1980). Most importantly, since World War II, hundreds of synthetic organic chemicals (SOC's) are being developed every year which eventually find their way into the aquatic environment. As many as 423 SOC's have been found in fresh water, 325 of which were found in drinking water. Others, such as trihalomethanes, are formed as the result of treatment processes themselves. If there are cities and industries upstream of a water supply, we don't have to complete a lot of studies to know there are contaminants in the drinking water (Okun, 1977).

Presently, monitoring for some SOC's in North Carolina is completed only once a year and inorganic pollutants are monitored quarterly (Moorefield, personal communication). The North Carolina Water Resources Framework Study (1977) admits that "lack of day to day monitoring could permit use of contaminated water for an extended period of time." Although a study plan for monitoring water quality in Randleman Lake has no yet been developed, it is likely to be carried out only on a montnly basis for conventional and toxic pollutants (pesticides and heavy metals). Many of the compounds monitored may not be detectable with the available technology (Randleman Conference).

Water quality is theoretically maintained by a system of classifications, standards, and effluent limitations that continue to become more stringent with time. However, the standards for some pollutants may be 20 years behind the times or may even be nonexistent, considering the variety of possible contaminants (Okun, personal communication).

Fifteen per cent of the nation's waters do not meet water quality standards because of nonpoint source pollution. As the per cent of impervious surfaces increases in a watershed (a consequence of development), the water quality of the runoff decreases (Back, 1980). Moreover, the pollutional impact of a curbed and guttered development is significant when compared to an undeveloped area. The largest pollutional contribution to runoff is from motorized vehicles, which contains leaded exhaust, metal and brake wear, oil and fluid leakage, and tire wear (Forbes, 1981). According to one study, the nonpoint source runoff in the Cape Fear River Basin contains zinc and lead and low levels of the pesticides Trifluralin, Atrazine, DDT, DDE, and methyl parathion (Pfaender, 1977).

The FEIS states that upstream from Randleman the estimated average biological oxygen demand (BOD) loading from agricultural activities is about 2/3 as large as that from point sources. Nonpoint source pollution is especially significant after storm events. Contrary to belief, many indicators of pollution are not diluted by urban runoff and pollution is often worse during high flow periods, suggesting a large contribution of pollution due to runoff from urban land (Hook, 1976).

The use of waters in the Cape Fear region for drinking purposes is a major health concern (Pfaender, 1977). According to Dr. Okun:

> "The health effects of the long-term ingestion of low levels of contaminants in water are difficult to ascertain because they are insidious and are often screened by other factors.... While a causal relationship between the quality of raw water and cancer rates cannot be considered to be proven, the results do indicate some correlation between sources of water and cancer death rates, with surface waters that receive pollution from upstream being identified with higher cancer death rates than ground waters. The results become even more perturbing when it is appreciated that the latency period for most cancers is on the order of 20 to 30 years, and mortalities reported today result from exposures in the 1950's when the synthetic organic chemical industry was in its infancy."

The Water Quality Design Memorandum for the Randleman Project scheduled for release this year by the Corps has been cancelled because it was considered unnecessary (Jackson, personal communication). One year after impoundment the Jordan Reservoir has not stabilized and is presently not being used as a potable water supply. The water quality with respect to conventional parameters and heavy metals, however, has been better than expected, but no information is available on SOC's (Randleman Conference).

The Clean Water Act (PL92-500, Sect. 208) recommends area-wide water quality studies and a determination of the extent of nonpoint source pollutants. Unfortunately, funds have not been procured to complete these studies in the Cape Fear River Basin. According to Lindsay Cox, Piedmont Triad Council of Governments, there was "not adequate interest to pursue" the grants in this area (Alston, 1982).

Why invest in a water supply that will only increase water quality problems in the future? Standards will surely become more stringent and treatment more expensive and difficult to accomplish. Polluted sources should not be used as a public drinking water supply. Since it is virtually impossible to eliminate chemical pollution at the source and technology is not available to monitor and safely treat all the possible hazardous pollutants, what is needed is to draw upon protected sources. That is, preventive measures should be used to ensure water quality, not remedial ones.

The Public Health Drinking Water Standards (1962) state that "the water supply should be obtained from the most desirable source which is feasible, and efforts should be made to prevent or control pollution of the source." The Randleman Reservoir is certainly not the most desirable source and it still remains to be proven what is the most feasible.

To this date, no plans have been made to protect the watershed of the Deep River through land-use planning and the monitoring and control of nonpoint source pollution. Thus, the quality of the Deep River is marginal and will only degrade as development continues. It will present a threat to public health if used as a potable water supply.

The Corps predicts that the Randleman Reservoir would provide water supply for 25-50 years. After that, what will be our options? They will be considerably narrowed as watersheds become more and more degraded because of lack of planning. The Piedmont area, as well as the state of North Carolina, must develop a long-range plan of a regional water supply that will protect our remaining unpolluted watersheds and provide safe potable water for the public with greater potential capacity.

ALTERNATIVE CONSIDERATIONS

There is no single structural or non-structural alternative to the Randleman Dam. Several must be considered in concert depending on the needs of the particular area. Some have been dismissed by the Corps and the municipalities without in-depth studies of their benefit-cost ratios, environmental and social impacts, or long-range flexibility to meet need. It is up to each individual municipality to decide if the Randleman Dam is its best alternative (Randleman Conference).

According to Ray Shaw, Water and Sewer Operations, Greensboro, the city has looked at alternative sites but is seeking a feed from the south, for engineering reasons (Randleman Conference). Its conservation efforts have included a successful leak detection program and public education by means of bill inserts. It has not proposed any rate structure changes.

Lynn O'Neill, Water and Sewer Operations, admits that High Point has not done any official analysis of alternatives but that all the potential dam sites are already in use. The city has a moderate conservation program featuring leak detection and encouragement of use of water-saving devices. If Randleman water were not to become available, High Point could legitimately claim Yadkin River water since it is located partially in that basin (O'Neill, personal communication).

Town manager Phil Pendry, says that Randleman is presently comparing the costs of dredging the Polecat Creek Reservoir to their share of the Randleman Project costs. He claims no conservation program is needed in the town (personal communication).

John Frezell, manager of Jamestown, reports that the town is not considering any alternative sites but would buy water from other municipalities if the need arose. They presently have no aggressive conservation program (Frezell, personal communication).

Conservation as an alternative

A state-wide study of 54 communities reports widespread support for conservation:

> "Our research has uncovered a tremendous reservoir of citizen and industry support for water conservation. The cynical views of many water professionals that citizens are disinterested, inactive, and uninformed with respect to general water resource issues are not supported by our data." (Smith, et al., 1982)

The highest ranking problem for residential and industrial users was listed as water quality while water management officials listed water supply expansion as their highest priority. After reviewing 45 conservation studies from all over the country, the study concluded that communities can realistically save as much as 25% with modest conservation efforts, and as much as 50% with more stringent measures. The Office of Water Resources (NRCD) estimates that 20% of water can be saved through conservation, if it includes leak control.

A simple exercise of computing the average amount of water used in the city of Greensboro for residential toilet flushing revealed that up to 2 MGD of water could be saved if every toilet were fitted with a water-saving device (Spainhour, personal communication). That is almost 10% of the city's daily consumption. Even more savings could be realized through the use of other water-saving devices such as faucet and shower-head aerators and by detecting and correcting home leak problems. Furthermore, water-use habits and techniques could be altered by public education efforts. The Environmental Protection Agency has estimated that up to 35% of household water consumption could be saved with the use of various water conservation devices and techniques (Water Conservation for the City of Greensboro, October 1979).

Smaller and more protected reservoirs

Since the population projections used by the Corps have been greatly exaggerated, smaller reservoirs could supply water as the need arises. The added benefit to this approach would be the selection of more protected water sources.

The Benaja and Altamahaw reservoir sites northeast of Greensboro would provide water of much higher quality because of their location. These sites were considered in the 1977 Upper Cape Fear Water Supply Alternatives but were not included in the Randleman Lake FEIS. Although the cost of pumping and distribution would be greater than for the Randleman, a savings in treatment costs would be realized because the water would be of higher quality.

Interbasin transfer

This option is considered to be politically impossible in the State of North Carolina at present. Yet it has been studied as an option in several studies including the Upper Cape Fear Water Supply Alternatives and the North Carolina Water Resources Framework Study, which concludes:

> "As North Carolina continues to develop and competition between water users increases, existing laws, particularly the doctrine of riparian rights, will become less and less effective in dealing with emerging situations."

According to Ray Shaw, "To take water from the Dan [River] to Greensboro would be like stealing leaves in the fall." Joe Grimsley, secretary of the North Carolina Department of NRCD says "...in the long haul there ain't no question that they've got to tap the Dan." (Alston, 1982).

The U.S. Water Resources Council describes the upper Cape Fear area as a rapidly growing industrial area situated on small headwater streams with relatively low flows. If growth is to continue in this region they suggest interbasin transfer as a means of obtaining future water supplies.

SIERRA CLUB RECOMMENDATIONS

The Sierra Club recommends that all federal funds for the Randleman Project be withheld and the project be restudied after the following can be accomplished:

1. An area-wide water quality study and monitoring of storm runoff to determine the extent and components, where feasible, of nonpoint source pollution.

2. The development of a land-use plan with watershed protection given the highest priority.

3. A restudy of the alternatives, especially smaller and more protected reservoir sites, conservation, and interbasin transfer, with a consideration for water quality and social impact as well as economic feasibility.
4. A reevaluation of the project's benefit cost ratio with current interest rates.

Additionally, the Sierra Club recommends that the state of North Carolina should create a mechanism to develop comprehensive regional and long-range plans for meeting water supply needs. This mechanism should examine the feasibility and impacts of all alternatives for providing quality water to the region.

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WATER QUALITY PROBLEMS

Mr. **Davis**. We are here today to oppose any further funding to the Randleman Reservoir project, and I would like to ask the Honorable Harold Brubaker, who is a member of the House of Representatives, State of North Carolina, representing this district to make our statement, and I would like to follow with a comment.

Senator **Mattingly**. Welcome; please proceed.

Mr. **Brubaker**. Thank you, Senator. Glad to have a southerner in front of me this morning.

Senator **Mattingly**. It does make it more comfortable, doesn't it?

Mr. **Brubaker**. I am a member of the House of Representatives in North Carolina, a member of the appropriations committee. We sure appreciate when people come before our committee not wanting any money and I am here this morning to represent people in Randolph County. Our county commissioners unanimously oppose the funding of this project simply because no one has addressed the question of quality water in the Randleman project. It will be located on a class C river, which has been stated in the past, by the time everything would be completed, according to the Army Corps of Engineers, 70 percent of the runoff from High Point-Greensboro will be coming to this area. Even below the dam, approximately 60 percent of the water at a given time will be from sewage treatment plants. Our point is, we oppose the project on the basis that we feel, to use a southern term in North Carolina, we feel that the bureaucrats have snookered the Members of the Senate and the House up here. They haven't been told all the facts. The budget keeps climbing year after year, and we think it is time that those of us who have been elected—yourself, too, Senator—look at these projects in depth. We think in trying to trim the Federal budget that here is a project not worthy of a dam. There are other waters where water could be received from. The county commissioners in Randolph County are looking for other sources of water at the present time.

It is not a matter of being opposed to it, but they are finding alternative sources for water. The repayment, as asked earlier this morning, the local cities and towns will have to double and triple their tax base in order to repay the debt placed upon the area.

Yes, we need water in areas of Randolph County, but we want quality water, Senator, and, again, we don't think it has been checked into in depth. Thank you, sir.

WATER SUPPLY NEEDS

Mr. **Davis**. Mr. Chairman, to elaborate just a little on what Mr. Brubaker has said to you, we are here this morning to say to you people that this is a bad project. We realize that our friends to the north in Guilford County, in Greensboro and High Point area, perhaps, in the early 21st century, perhaps we will need water. Although we also see the fact the need for this water has been overestimated based on the 1970 through 1980 census. The population growth has been overestimated by the Corps of Engineers by 55 percent.

Also, the water use has been overemphasized by 30 percent. So based on these figures, we feel like the need is not as critical as they are trying to lead us to believe. Accepting the fact that this area will need additional water sometime earlier in the 21st century, we want to emphasize the fact that this project is not the answer to the problem. The water basin that they are referring to here begins in the upper Piedmont area. The entire watershed is made up of the city areas of High Point, Greensboro, Jamestown, and all these areas are potentially areas that would be subject to high development areas. This would create a real problem whenever we talk about water quality. At the present time, we have a project in an adjoining county, Chatham County, the Jordan project that has already been declared as not salable as a source for drinking water.

The primary pollution point for this particular lake is the Friada Front from the city of Greensboro. This project we are talking about here, the Randleman Dam project, would include all of the cities of High Point effluent, Jamestown, and many other smaller areas, plus the fact we would have a tremendous amount of nonpoint pollution that would be extremely hard to control. We are saying that we realize that our neighbors need water, but we feel like further study needs to be made in this area and look at the other possibilities before we get involved in a project that will essentially destroy a neighboring county, the county being Randolph, changing our environment and development patterns that we have as of now. We are saying to you, let's not make another mistake before we at least take a look. We have been appearing here, we appeared here a year ago, and there is no funding as of now for the Randleman project in the budget, but we are saying to you, let's not fund this project even with another request until further study is made.

I have many, many other things I could say to you but I know you have heard it all before. We are saying to you, let's take another look, let's don't put bad money in the same hole after other bad money.

STATUS OF PROJECT SUPPORT

Senator MATTINGLY. What is the position of the two Senators on that issue and your Governor?

Mr. DAVIS. As of now, we are not completely sure where our Senators stand, but Senator Helms has come out saying that he does want to address the need for water in the Greensboro/Guilford County area. Also he says that he does not support the condemnation of the amount of land in regard to recreation and flood control as indicated in this project.

The water project itself, the lake itself, will only cover approximately 3,500 acres, but the total project and the condemnation of land will amount to something over 10,000 acres with the rest of the land being in flood control and recreation. We feel like this is terribly excessive to take this much land out of an adjoining county to provide for somebody a place to play.

Senator MATTINGLY. How about the Governor?

Mr. DAVIS. Governor Hunt supports the project. You realize, this is an election year. He is running against Senator Helms, and perhaps this has perhaps had something to do with it.

Senator MATTINGLY. I hope they are thinking of the taxpayer.

Mr. DAVIS. I am running for taxpayer, and I succeeded in getting elected to that.

Senator MATTINGLY. I appreciate you both coming here to testify today. We will make everything you have here a part of the record. Thank you very much.

CENTRAL UTAH PROJECT

STATEMENTS OF:

GOV. SCOTT M. MATHESON, GOVERNOR OF UTAH

LYNN LUDLOW, GENERAL MANAGER, CENTRAL UTAH WATER CONSERVANCY DISTRICT

ACCOMPANIED BY:

ED PLIED, GENERAL COUNSEL TO THE DISTRICT

ROSCOE GARRETT, PRESIDENT OF THE DISTRICT

L.J. SIDDOWAY, MANAGER, RENTED WATER CONSERVANCY DISTRICT

Senator MATTINGLY. Next, we will hear Governor Matheson of Utah and Lynn Ludlow. They are here to testify on the Central Utah Project.

I would like to say, Governor, Senator Garn has asked me to apologize for him since he is currently chairing another hearing. I am sure you are well aware of the plight we go through. I saw you out there in the audience, and I didn't know how long we should wait on Senator Garn. He has sent his apologies.

Governor MATHESON. That is perfectly acceptable, Senator.

Senator MATTINGLY. The person you see in front of you also came in from another hearing to fill in for another member.

Governor MATHESON. It is a busy time back here, and I will have an opportunity to see Senator Garn. I can assure you he would be pleased to be here and support the appropriations.

Senator, I am joined this morning by Mr. Lynn Ludlow, the general manager of the Central Utah Water Conservancy District; Ed Plied, general counsel to the district; Mr. Roscoe Garrett, who is on my left, who is president of the district; and Mr. L.J. Siddoway, who is manager of the Rented Water Conservancy District.

Mr. Garrett and Mr. Siddoway have written statements, as I do, and I would like to ask all three of those statements be made a part of the record, and I will simply make a brief summation if that is acceptable.

PREPARED STATEMENTS

Senator MATTINGLY. That is fine. Without objection, all statements will be made a part of the record.

[The statements follow:]

STATEMENT OF GOV. SCOTT M. MATHESON OF UTAH

As Governor of Utah, I express appreciation to this subcommittee and to the U.S. Congress for continued support of the Central Utah Project. Authorized in 1956 as part of the Bureau of Reclamation's Upper Colorado River storage project, it remains the only major project for which Utah seeks Federal funding.

Careful development of water resource facilities and efficient and wise use of our existing water supply have been the key to Utah's growth. The lack of development of water resource facilities would be the limiting factor in the future progress and development of the State of Utah. That is why during the past 5 years the State of Utah has committed over $110 million in State funds to develop our water resources. Even with this commitment to our water development program, the State of Utah is not capable of doing all that must be done without Federal help.

The President's fiscal year 1985 budget recommendation to Congress for the Central Utah Project is $114,863,000. I encourage your approval of the President's recommendation. The funding request is for the following:

Unit/Purpose	*Amount*
Bonneville unit (construction)	$104,780,000
Jensen unit (construction)	2,418,000
Upalco unit (construction)	3,215,000
Uintah unit (preconstruction planning)	300,000
Nonreimbursable section 8 funds (fish, wildlife, recreation, operation and maintenance)	4,150,000
Total	114,863,000

Most of the requested appropriation will be used for construction of the Central Utah Project's Bonneville unit. Within the Bonneville unit, construction continues on the upper Stillwater dam and tunnel. Work will begin on the Taylor Canal drains in the Duchesne River area of northeastern Utah. Construction of the North Fork syphon, Jordan aqueduct reach 4, and Alpine aqueduct reach 3 is progressing on schedule. Exploratory investigations are scheduled to begin on the unit's Diamond Fork power project. Land purchases are planned for the Jordanelle Reservoir segment of the Bonneville unit.

For the past 28 years, the Central Utah Project generally has received wide support from elected officials and citizens of the State. Throughout my tenure in office, I have consistently supported congressional appropriations for the various ongoing phases of the project. However, the extended length of time it has taken to develop the Central Utah Project to its current status has had an effect on the original perceptions of the project.

In partial response to changing times and circumstances, we have substantively altered the process for selecting board members of our water conservancy districts. Previously, vacancies were filled by a panel of Federal judges after interviewing prospective applicants. Under the new procedures, board members are nominated by elected county commissioners, selected by the Governor, and confirmed by the State senate. Now, local officials are direct participants in the governance of conservancy districts.

As the project's water collection system nears completion, I have concluded that an opportunity now exists to undertake a thorough public review of the Central Utah Project's Bonneville unit. A number of complexities involving irrigation, municipal and industrial water needs, fish and wildlife, recreation, hydroelectric power development, and flood control need to be resolved.

These are not simply questions raised by avowed, traditional enemies of the CUP. They are issues being cited by important elements of the coalition that have always backed the project.

To dismiss these concerns without thorough review could easily lead to an unraveling of the cohesive consensus that has been the basis of the project's past political strength and support. These concerns must be addressed with respect and objectivity, and we must be willing to make changes and adjustments where the facts and analyses dictate.

The highly objective review I have requested, patterned loosely after the Federal environmental impact statement process, will be designed to consider the demographic basis of the project, its environmental impacts, economic benefits, general project engineering, and the advisability of various unit features. The review will be conducted by the Utah Department of Natural Resources, the office of planning and budget, and other State agencies. Local elected officials, interested citizens, and the general public will be involved throughout the process.

The Central Utah Project continues to rank high among the State's water development priorities. I wish to emphasize that pertinent observations, options, and recommendations which may be products of this review will not diminish the current construction and planning status of the Central Utah Project, nor negate the basic necessity for Utah to further develop its limited water resources. I anticipate a draft report of the review will be published this fall. After appropriate public comment, a final report will be available upon which the State's position on future funding and development will be based.

In Utah, irrigation water is urgently needed to supplement current water deliveries to agricultural lands. The demand for municipal and industrial water is expected to increase, particularly in the 12-county area to be served by the Central Utah Project. Several communities face water shortages in the near future if additional sources of supply are not developed.

Populations of Salt Lake and Utah Counties, the two most populous counties in the State, are expected to increase 3 percent annually through the 1980's. Slightly higher growth rates are predicted for other areas to be served by the Central Utah Project. Utah's population growth rate is three times the national average. And the birth rate in Utah is nearly twice the national average.

I mention these few facts to illustrate that we in Utah are constantly mindful that our State's overall development hinges on a coordinated and integrated water development program. We wish to bring the essential elements of the Central Utah Project to a quick and successful conclusion to aid the State in meeting its water and development demands.

We reiterate our appreciation for your support for the Central Utah Project in the past and encourage your continued efforts to see this project through to completion.

Thank you.

STATEMENT OF L. Y. SIDDOWAY, MANAGER, UINTAH WATER CONSERVANCY DISTRICT

Mr. Chairman and Committee Members:

I am appearing here today representing the Board of Directors of the Uintah Water Conservancy District whose headquarters are located at Vernal, Utah. We are in support of funding for all of the Central Utah Projects as has been recommended by the President in his Budget for Fiscal Year 1985. The Budget recommendations for the Central Utah Project are as follows:

Jensen Unit, C. U. P.	$ 2,418,000
Bonneville Unit, C. U. P.	$104,780,000
Uintah Unit, C. U. P.	$ 300,000
Upalco Unit, C. U. P.	$ 3,215,000
Recreation & Fish & Wildlife (Section 8) C. U. P.	$ 3,110,000
TOTAL	$113,823,000

The Uintah Water Conservancy District was created by the Fourth Judicial District Court at Vernal, Utah in 1956 to sponsor and repay the costs of the Vernal Unit, Central Utah Project. The Vernal Unit has been in operation since 1962 and has made 22 of 40 payments on the municipal obligation and 18 of 50 payments on the irrigation obligation. In 1976 the Uintah Water Conservancy District contracted with the U. S. Bureau of Reclamation to repay the costs of the Jensen Unit, Central Utah Project and will on January 1, 1985 assume the responsibilities of operating and maintaining the Jensen Unit.

The funding for Fiscal Year 1985 for the Jensen Unit will complete construction of Tyzack Aqueduct Reach 2, which connects to three municipal water systems; also, a contract award will be made to construct the supervisory control system for the Red Fleet Dam, Tyzack Aqueduct Reach 1, and Tyzack Pumping Plant. Design of Tyzack Aqueduct Reach 3 is also a part of the Jensen Unit funding.

The Jensen Unit is located in Eastern Utah in the Uintah Basin. The major feature now complete is the Red Fleet Dam located on Brush Creek, a tributary to the Green River. From Red Fleet Dam an aqueduct (Tyzack Aqueduct Reach 1) will carry Municipal and

Industrial water supplies to Vernal City and surrounding areas in Ashley Valley. Municipal water will, also, be delivered to the town of Jensen. Industrial water will be made available for the Chevron Resources Phosphate Plant. Other features of the Project include irrigation water for 4,080 acres, mostly supplemental; Jensen Unit drainage system; recreation facilities at Red Fleet Dam; Fish and Wildlife development at Red Fleet; and a firmed up water supply for the Stewart Lake Waterfowl Management Area.

The Central Utah Water Conservancy District has under construction a Water Treatment Plant. The Water Treatment Plant will provide a quality water supply to Vernal, Ashley Valley, and Jensen. The Water Treatment Plant is located where it can receive raw water supplies from Red Fleet Dam; also, from Ashley Creek sources, and sometime in the future receive water from Steinaker Reservoir which is part of the Vernal Unit, Central Utah Project.

I was impressed in reading of the early exploration of the Uintah Basin. In 1861 President Lincoln issued an Executive Order establishing the Uintah Indian Reservation and at a later date in 1864 Congress passed an act to vacate the Indians in the Utah Territory (Utah Valley) and settle the Indians in the Uintah Valley (Uintah Basin).

This newly created reservation of more than one million acres stretched from the Wasatch Mountains on the West to the Sand Ridge on the East and from the summit of the Uintah Mountains on the North to the Book Cliffs on the South.

In August of 1861 President Brigham Young of the Mormon Church ordered a small reconnaissance party to check out the Uintah Basin. By September of 1861 the party returned to Salt Lake City and reported the Uintah Basin to be "entirely unsuitable for farming purposes - it was one vast contiguity of waste, and measurably valueless excepting for nomadic purposes, hunting grounds for Indians, and to hold the world together."

Early settlement of Ashley Valley (named after William Henry Ashley, an early fur trader) took place in the early 1870's. Individual farmers and ranchers from Heber and Provo, Utah drifted into Ashley Valley, saw the excellent agricultural and grazing potential, and began to divert water from Ashley Creek for the first farming enterprise. Today in excess of 250,000 acres of land are being farmed in the Uintah Basin.

Besides the farming and livestock industry that followed, it should be noted that the Uintah Basin is a vast storehouse of mineral resources such as: Bituminous Sandstones - Occur in several localities in the Uintah Basin, the most prominent being Asphalt Ridge, West and Southwest five miles from downtown Vernal; Gilsonite Deposits - Lie mostly in Uintah County but wholly in the Uintah Basin, are a major mineral resource having been mined since 1888; Oil Shale - Estimates of the yield from oil shale in the Uintah Basin total 120 billion barrels of recoverable oil; Oil and Gas - Several fields developed and producing, hundreds of wells located in all parts of the Uintah Basin; Phosphate - Large deposit fifteen miles north of Vernal City being mined, processed, and shipped to markets in the United States and Canada.

1983 was the year of the floods in Utah. Major damage was done by excess flows in all parts of Utah, including the Uintah Basin. Damage would have been much greater if the Central Utah Project dams had not been in place to assist with flood control. Next year or the year after, it will be "drought" and the same dams will be retaining runoff water to supply irrigation for crops in times of shortage in late July, August, and September and supplying the culinary needs of many residents of the Uintah Basin.

In conclusion I wish to re-emphasize that I support funding for all Central Utah Projects: Bonneville, Upalco, Uintah, Jensen, and Section 8 funding for Recreation, Fish & Wildlife. All of these projects are very important to the State of Utah in providing water for people, for agriculture, for industry, for fish and wildlife, for flood control--the future of Utah will be determined by how well we plan and develop our water resources, keeping in mind Utah is the second driest state in the nation with an average yield of 8 to 13 inches of precipitation each year. Most precipitation comes in the winter in our high mountains and runs off in a short 60-day period. We must build the Central Utah Project to help us store and thereby use our vital water supplies.

STATEMENT OF R. ROSCOE GARRETT, PRESIDENT, CENTRAL UTAH WATER CONSERVANCY DISTRICT

Mr. Chairman and Committee Members:

I am R. Roscoe Garrett, President of the Central Utah Water Conservancy District which serves as the legal agency to assist in the development of water resources in 12 Utah counties. It is with a great deal of honor that I appear before this distinguished committee to support continued funding for the planning and construction of the Units of the Central Utah Project. The Central Utah Water Conservancy District, by the attached Resolution, (Exhibit A) concurs in and supports the President's Fiscal Year 1985 Budget recommendations to the Congress of the United States for the funding of the Central Utah Project. His recommendations include the following funds:

Unit	Amount
Section 5 (Reimbursable)	
Bonneville (construction)	$104,780,000
Jensen (construction)	2,418,000
Upalco (construction)	3,215,000
Uintah (preconstruction activities)	300,000
Section 8 (Non Reimbursable)	
Fish, Wildlife & Recreation	
Bonneville	3,024,000
Upalco	86,000
Operation & Maintenance	
Bonneville	960,000
Upalco	80,000
Total Fiscal 1985 Budget Recommendation	$114,863,000

The Central Utah Project is the largest water resource project of its type in the State of Utah. The Project is being planned and constructed by the U.S. Bureau of Reclamation as an intricate multi-purpose project involving storage dams, pipelines, aqueducts, canals, diversion dams, pumping plants, dikes and hydroelectric power plants.

To facilitate planning and construction, the Central Utah Project has been divided into five separate units. Four of these units, the Vernal, the Bonneville, the Jensen and the Upalco, were authorized for construction in 1956 as a part of The Colorado River Storage Project Act (Public Law 84-485, 70 Stat. 105). The Central Utah Water Conservancy District has or will sponsor and contract with the United States Government for the repayment of reimbursable costs of the Bonneville, Upalco and Uintah Units. The Uintah Water Conservancy District is the sponsoring agent for the Vernal and Jensen Units.

On the units the District sponsors, it will administer the sale and delivery of project water and operate and maintain the project facilities once they have been constructed and turned over to the District by the Bureau of Reclamation. We are proud to be a part of the Federal Reclamation Program and acknowledge that approximately 80 percent of the cost of the Central Utah Project will be reimbursable costs and repaid to the U.S. Treasury. The District's repayment sources are through water sales and local taxes. Colorado River and Central Utah storage project power revenues play a key role in project repayment. The non-reimbursable costs included are assigned to recreation, fish and wildlife, flood control and other related costs which benefit the general public.

BONNEVILLE UNIT

The $104,780,000 included in the President's budget recommendations for the Bonneville Unit will, among other uses, provide; for the continuation of construction on the Strawberry Aqueduct and Collection System; continue with construction of the Jordan Aqueduct, a part of the municipal and industrial system; and will permit the continuation of preconstruction activities on the Diamond Fork Hydroelectric Power Complex.

The Municipal and Industrial System of the Bonneville Unit is located in Salt Lake, Utah, and Wasatch Counties. The system will provide 92,000 acre-feet of water annually for municipal and industrial use in northern Utah County, Wasatch County and Salt Lake County. The Project will also provide as a secondary benefit 14,100 acre-feet of water for supplemental irrigation on 22,740 acres of presently irrigated land in the Heber-Francis area of Wasatch and Summit Counties. It also will provide hydroelectric power, flood control, improve recreational opportunities, esthetic values, and include measures to enhance fishery and wildlife.

Jordanelle Dam and Reservoir on the Provo River will be the key feature of the Municipal and Industrial System. Construction should start on this facility in 1985. After studying several alternative locations on the Provo

River, a site 6 miles north of Heber City was selected. Here water descends through natural rock formations that will serve as firm abutments and foundation for the earthen Jordanelle Dam.

Water withheld at Jordanelle Reservoir will have to be replaced in Utah Lake since all the Provo River waters, except for flood flows in high runoff years, are already appropriated and used under the water right appropriation process of ~~the State o~~f Utah.

The water rights for Jordanelle Reservoir will be obtained by the U.S. Bureau of Reclamation under these same water laws. The primary applications to appropriate water for Jordanelle is Application No. 40523 which seeks to appropriate 300,000 acre-feet for direct storage of water from the Provo River and Exchange Application No. 398 which requires replacement water to Utah Lake to permit storage in Jordanelle. Replacement of these waters to Utah Lake will be accomplished by releasing water from Strawberry Reservoir, a Central Utah Project feature, via Diamond Fork and Spanish Fork Rivers, from evapotranspiration salvage of Utah Lake waters or from project return flows accumulating in Utah Lake.

During wet cycles, which occur during random years, the Provo River does have fairly large quantities of unappropriated water. This year, one of these wet cycle years, Provo River water is runnning through the system to Utah Lake where it presently is causing flood damage and then from Utah Lake down the Jordan River into Great Salt Lake. During 1983 there would have been more than 300,000 acre-feet of such water available for storage in Jordanelle.

There are other times when the waters in the Provo River are more than adequate to meet existing Provo River rights, but Utah Lake, which is itself a storage facility, is not full. At such times the surplus water of the Provo River may belong to those who have prior rights to store water in Utah Lake. This surplus Provo River water can be stored in Jordanelle, if an equal quantity of water is replaced in Utah Lake. The Bureau has filed Exchange Application No. 398 with the State Engineer of the State of Utah which proposed to make water available in Utah Lake so that surplus water of the Provo River, which would otherwise belong to Utah Lake users, can be stored in Jordanelle.

This replacement can be made from a variety of sources. One is to dike (and thus dry up) Goshen Bay and Provo Bay. This will save large quantities of water which are presently lost through evaporation. The project can also place water directly into Utah Lake from Project facilities such as, Strawberry Reservoir. Substantial quantities of Central Utah Project water will be used to irrigate lands adjacent to Utah Lake and the return flow from that irrigation will be to Utah Lake. That return flow water can be used for replacement. Also, Utah Lake rights are largely used now to irrigate lands in Salt Lake County. These lands are being subdivided and the Utah Lake irrigation water is becoming surplus. The Central Utah Water Conservancy District is purchasing these water rights and they, too, can be used for replacement. Thus, when Utah Lake is full, there is a surplus of water which can be appropriated and stored under Applications to Appropriate. When Utah Lake is not full, the surplus Provo River waters can be stored, if, but only if, an equal quantity is replaced to Utah Lake. It is the opinion of the District, its Attorney, and engineers with the U.S. Bureau of Reclamation that there is sufficient water which can thus be made available for the Project without interferring with or encroaching on any existing rights.

UPALCO UNIT

The District supports the President's recommendation of $3,215,000 for construction on the Upalco Unit. (See Exhibit B) This unit was included as a part of the authorization of the Central Utah Project participating project in the 1956 Colorado River Storage Project Act. The citizens to be benfitted from this Project have waited for the date when a realistic construction start would take place. They need this storage water to firm up their water supply and to ease the burden of competition between the Indians and Non-Indians in this area for water.

These funds will be used for land acquisition for Taskeech Dam and Reservoir, Taskeech Service Canal and the rehabilitation of associated canals. It will also provide funds for the relocation of the Moon Lake Road around the reservoir and the construction of a field laboratory.

UINTAH UNIT

The Uintah Unit was authorized in 1968 by the Colorado River Basin Project Act (P.L. 90-537). The funds recommended for this Unit are to be used for completion of preconstruction activities which include; preparation of the environmental statement; designs and estimates and preparation of a definite plan report.

JENSEN UNIT

The District has supported the Uintah Water Conservancy District in the construction of the Jensen Unit. We continue to support funds for the completion of this water project which will provide water to this energy-rich area of our State.

CONCLUSION

The funding levels for the Central Utah Project over recent years have been extremely favorable towards a more progressive construction program. It is reducing the adverse economic impacts of inflation due to delays.

The construction of all the Units of the Central Utah Project is still and will remain through the turn of the century as the most vital development in water reclamation in the State of Utah. The water that will be developed and delivered to meet our present requirements and to supply Utah's future generations is urgently needed. The District solicits your support of the President's Budget.

Thank you.

EXHIBIT A

RESOLUTION

WHEREAS, the President's Fiscal Year 1985 Budget Recommendations to the Congress of the United States included the following request for new funds for the Units of the Central Utah Project:

Unit	Amount
Section 5 (Reimbursable)	
Bonneville (construction)	$104,780,000
Jensen (construction)	2,418,000
Upalco (construction)	3,215,000
Uintah (preconstruction activities)	300,000
Section 8 (Non Reimbursable)	
Fish, Wildlife & Recreation	
Bonneville	3,024,000
Upalco	86,000
Operation & Maintenance	
Bonneville	960,000
Upalco	80,000
Total Fiscal 1985 Budget Recommendation	$114,863,000

WHEREAS, these funds provide for an adequate construction and preconstruction program for the Units of the Central Utah Project, and

WHEREAS, the past delayed construction program on the Central Utah Project may place an unequal and unfair financial repayment burden on the citizens of the District in the construction of the units of the Central Utah Project under the Colorado River Storage Project Act.

NOW, THEREFORE BE IT RESOLVED, that the Central Utah Water Conservancy District does hereby concur with the recommendations included in the President's Budget and encourages Congress to appropriate the funds as included in the President's Budget, and

BE IT FURTHER RESOLVED, that the Board of Directors of the Central Utah Water Conservancy District encourages a continued aggressive construction program for the Central Utah Project, and

BE IT FURTHER RESOLVED, that the Directors of the District request the Governor of the State of Utah and Utah's Congressional Delegation to support and encourage Congress to appropriate the funds as included in the President's Budget, and

BE IT FURTHER RESOLVED, that copies of this Resolution be transmitted to the President, Secretary of Interior, Commissioner of the Bureau of Reclamation, Utah's Governor, Utah's Congressional Delegation, and other interested parties.

CERTIFICATE

I certify that the foregoing is a true and accurate copy of a resolution adopted by the Board of Directors of the Central Utah Water Conservancy District on February 9, 1984.

Lynn S. Ludlow

Lynn S. Ludlow
Secretary

EXHIBIT B

RESOLUTION

WHEREAS, in as much as the President's Budget for Fiscal Year 1985 included $3,215,000 for construction of the Upalco Unit of the Central Utah Project, and

WHEREAS, the Board of the Central Utah Water Conservancy District hereby does adopt and support that level of funding for Fiscal Year 1985, and

WHEREAS, the Bureau of Reclamation has proceeded to a point in the preparation of the design and specifications of certain facilities that require certain and specific rights-of-way, and

WHEREAS, these certain and specific rights-of-way are on Indian Tribal lands, and the Ute Tribal Business Committee have heretofore declined to cooperate and make the lands or permits available for project construction purposes.

NOW, THEREFORE, BE IT RESOLVED AND IT IS HEREBY RESOLVED, that the Board of Directors does hereby adopt and support the funding of $3,215,000 for Fiscal Year 1985 for construction purposes for the Upalco Unit of the Central Utah Project and urges the Bureau of Reclamation to proceed immediately with construction status, and

BE IT FURTHER RESOLVED, that this Board of Directors requests the Bureau of Reclamation to work with the Ute Indian Tribe to make certain and specific rights-of-way or permits for rights-of-way available for project construction purposes. In the event the lands or the permits are not made available in a timely manner, the Bureau of Reclamation, to immediately take such action as necessary, including condemnation proceedings, to acquire the necessary lands and permits for project construction purposes, and

BE IT FURTHER RESOLVED, that copies of this Resolution be transmitted to the President, Secretary of Interior, Commissioner of the Bureau of Reclamation, Utah's Governor, Utah's Congressional Delegation, and other interested parties.

CERTIFICATE

I certify that the foregoing is a true and accurate copy of a resolution adopted by the Board of Directors of the Central Utah Water Conservancy District on February 9, 1984.

Lynn S. Ludlow

Lynn S. Ludlow
Secretary

CURRENT FLOODING CONDITIONS

Governor MATHESON. It may seem a little strange for a Governor of Utah, which is the second most arid State, but having the greatest flooding problems in history, we have too much water to be coming back and testifying in favor of a very substantial appropriation to continue to conserve and store water. But even the Great Salt Lake is about 5 feet higher this year than it was a year ago and I am looking forward to a very difficult flooding problem this spring. We know Mother Nature is only to inflict that pain for a brief time and that our long-range plan is to complete the Central Utah Project as the major component of our statewide water plan.

FUNDING REQUEST

As a matter of fact, Senator, this is the 28th year that the Governor of the State of Utah and the Central Utah Water Conservancy District have been coming back to Washington to testify in support of funding for the Central Utah Project. The Congress has been very generous with us and we are proceeding now at the point where the collector system is nearly in place and the funding this year as recommended by the administration is nearly $115 million. I am here, and all of my colleagues are here, to encourage the approval of the President's recommendation for next fiscal year for the Central Utah Project.

Basically, its the only project in the State in which we are seeking or will seek Federal funds. Since I have been Governor, we have recognized the need for a little self-sufficiency at home and, as a consequence, the first year I was Governor and, subsequently, four separate times, I have gone to our legislature at home and we have issued general revenue bonds to build water projects of the size we can fund, and invested now $110 million just since I have been Governor of State funds for all other water projects.

So, we do believe in the partnership and the Central Utah Project, of course, is the one remaining Federal authorized project which we seek to complete.

BONNEVILLE UNIT, CUP

It is also important for us at this particular time to stress the construction of what is called the Bonneville unit in the Central Utah Project. There are five separate units, but this is an interesting transbasin diversion concept where we bring water down into the Bonneville basin where the people live from areas of the State which normally would not drain into that part of the country. And with the explosive growth we have in our State, although I have only been Governor a little over 7 years, the population of Utah has increased nearly 400,000 people just in that length of time. The State population has increased 1.6 million, or about 3 percent a year, and they are all located right where the benefits from the Bonneville unit will ultimately flow. So we are very anxious, of course, to plan ahead, and this is one of the vital ingredients in the future planning for necessary agricultural water for that portion of our State.

The funds this year will allow us to move into the land acquisition and rights of way for a very important reservoir called the Jordanelle which is an important segment of that Bonneville unit.

I can't recall a time when the Central Utah Project hasn't stirred up interest and where concerns have been continued with respect to various features of it, as all water projects have done. When President Carter came in, he put it on the hit list. He has not recovered from that yet, Senator. So we have gone through 28 years with this very important project. It is alive and well and moving down the road in beautiful style.

PROJECT REEXAMINATION

There was an interest shown in the last year or two; it has been around a long time. Maybe it is an opportunity for us to reexamine the project to make sure we have engineered it right or we are spending the money wisely and make certain all the various interest groups concerns are met. So at the request of the Bureau of Reclamation, and with the support of the board of directors of the Central Utah Conservancy District, I have decided to do a complete and careful reanalysis of the CUP from the point of view of the environment and all the relative factors associated with it so that we can be certain that the economic benefits, the engineering, all the various unit features will be done in the highest and best form and at the least possible cost. That doesn't mean we are opposing it; it means we are trying to do a better job. And I am doing that within the Department of Natural Resources and with my planning and budget people. We will complete that this fall, but the important thing is we are making another review of project cost and environmental impact—an open process to make sure everyone understands it.

After 28 years you have a whole new generation of people to educate about the project in which you are involved.

Ultimately, this will be an absolute, essential portion of our State water plan. I am here to advise you that over the years, the State has been firmly behind the project, that the need for it is real, that this year's budget is a very generous one, we are very grateful for the administration's interest in it, and we are here to support it.

I mentioned a moment ago the population explosion we are having out there. The headquarters of the Central Utah Project happens to be in the spot of the United States which has the highest birth rate in the United States, Senator. So we have a lot of thirsty mouths out there to take care of. That population and this plan go hand in hand with our overall resource development in the State of Utah.

I guess I would conclude by saying this project fits as an integral part into the overall management of growth pattern in our State for the next 25 to 50 years. It has been there for 28 years now. We will be able to get it completed with a few more years of help from the Congress, and we are very grateful for the chance to be here and express those views.

Senator MATTINGLY. We appreciate your comments this morning, Governor Matheson. Now, you made the comment that this project has been going on some 28 years?

Governor MATHESON. Yes.

Senator MATTINGLY. You have been Governor for 7 years and, of course, with Senator Garn and the committee pursuing it, between the two of you, I think that is the reason why it has succeeded and will continue to go forward and why it will end up helping to take care of that high growth rate in the State of Utah.

We appreciate you coming up and testifying.

Governor MATHESON. Thank you very much.

Senator MATTINGLY. Thank you.

NEW YORK METRO AREA WATER RESOURCE PROJECTS

STATEMENTS OF:

HENRY G. WILLIAMS, COMMISSIONER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

BILL ROMER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Senator MATTINGLY. Henry G. Williams, commissioner, New York State Department of Environmental Conservation. We welcome you this morning.

Mr. WILLIAMS. I am Hank Williams.

Senator MATTINGLY. Your entire statement will be made a part of the record. If you could proceed to summarize it we can conclude.

[The statement follows:]

STATEMENT OF HENRY G. WILLIAMS, COMMISSIONER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Mr. Chairman and members of the committee, my name is Henry G. Williams. I am commissioner of the New York State Department of Environmental Conservation. My department is New York State's water resources agency. I appreciate this opportunity to present New York's testimony on the civil works program of the Corps of Engineers for Federal fiscal year 1985.

For many years, the civil works program has provided great benefits to all the citizens of New York through projects concerning water supply, distribution systems, flood and erosion control, navigation, recreation, and the safeguarding of environmental resources.

Today, I want to highlight two Public Law 89-298 programs which have been very important in helping us in our efforts to provide adequate water supply and delivery systems for our citizens.

First, the section 214 program has enabled us to develop fundamental information about the condition of our water supply infrastructure in large and small communities throughout the State. We are requesting $1 million for Federal fiscal year 1985 under the section 214 program. Second, the Northeast water supply study called NEWS has explored water supply needs of the New York Metropolitan Area, the lower Hudson basin, and adjacent watersheds. We need $1 million in Federal funds in Federal fiscal year 1985 to advance the recommendations of the NEWS study and the Corps of Engineers action plan related to it.

In addition, we have a list of 25 specific projects or studies which are very important to New York State, 8 of these are included in the President's proposed budget at levels which are insufficient to do the job properly. Even worse, no funds at all have been budgeted for the other 17 projects. I respectfully and strongly request an additional $22 million to adequately address the modest program of civil works which these 25 projects represent.

Public Law 89–298 is landmark legislation because it addresses the water supply needs of our great metropolitan areas. It also recognizes a proper role for the Federal Government in helping to solve the Nation's water supply problems. Public Law 89–298 authorized both the section 214 and the NEWS study.

We must note, however, that the NEWS study which was completed in 1977 proposed further evaluations that would focus on issues relating to new-source developments. These issues include reassessment of the water supply deficit in view of recent drought experiences and changed population and growth projections, reevaluation of a number of alternative solutions to environmental problems, and preliminary work related to the third city water tunnel.

Seven years have passed and the additional evaluations called for in the NEWS study have yet to be initiated. Funding for these additional studies and for review by the Corps of Engineers for construction drawings of city tunnel No. 3, pending further Federal involvement, is needed now. Costs for this initial study are estimated at $15 million, of which we are requesting $1 million for Federal fiscal year 1985.

Along the same lines, H. Rept. 98–308 on the fiscal year 1983 supplemental appropriations bill, noted the conference committee's concern over the water supply problems of the greater New York area, and directed the Corps of Engineers to address the situation. The Corps' work over the last few months in this regard is called the New York Metropolitan Area water supply study (NYMS), and my department has cooperated with the Corps to develop an adequate response to the committee's charge.

We have reviewed the Corps' draft and we believe that it contains good information. However, we disagree with the conclusion drawn in the Corps' testimony on February 8 at your hearings which suggests that the Hudson River project portion of the NYMS is only of local interest. Clearly, there should be no doubt that the problems and the solutions of such a huge project are regional, even national in scope. Indeed, the Corps' testimony elsewhere stated: "The third tunnel minimizes the possibility of major system failure that would create extreme national stress."

Incidentally, we urge release and publication of the December 23, 1983, report titled: "Greater New York Area Water Supply Update" as soon as possible.

As we all know, severe weather just this past week produced flooding, loss of life, and significant property damage from the Carolinas to New York and New England. Flood damage occurs in some portion of New York State every year, particularly in the nearly 1,500 communities which are flood prone. Flood damage this past week, for example, will amount to scores of millions of dollars and serve to emphasize the serious problems facing many communities where Federal assistance is being sought. The proposed civil works funding assistance falls far short of the amount necessary to support planning and construction of local flood protection projects. Our requests for funding for high-priority projects are described individually in the material I am submitting with my testimony.

Thank you.

TRADITIONAL CIVIL WORKS PROJECTS

Damaging floods occur in some portion of New York State virtually every year. Estimates of average annual damages are as high as $100 million. It is estimated that 1.5 million people live in the nearly 1,500 flood-prone communities. Continuing flood losses, as occurred this past week, serve to emphasize the serious problems facing many communities where Federal assistance is being sought. The proposed civil works funding assistance falls far short of the amount necessary to advance planning and construction of feasible local flood protection projects. Requests for increased levels of funding for projects about which we have sufficient knowledge to estimate those levels are discussed in the following paragraphs and/or summarized in the attached table.

Ellicott Creek.—This authorized flood control project is the most important pending flood control project in New York State. The State has committed in excess of $2 million for lands and relocations and has constructed a major segment of the project in conjunction with highway construction. The State strongly supports funding in the amount of $3.3 million for construction of the first segment of this project which will permit operation of facilities constructed by the State.

Fire Island to Montauk Point reformulation study.—During 1978, the President's Council on Environmental Quality required the Corps of Engineers to reformulate this proposed hurricane protection project. After 5 years of effort and the expenditure of $4.7 million, this study is incomplete and funds have not been included in the budget for fiscal year 1985. Without completion of the study, there is no basis for future planning and project development by Federal or non-Federal interests. Funding in the amount of $1.2 million will allow a reasonable level of completion.

Dansville.—Funds were not included in the fiscal year 1983 budget due to New York's refusal to voluntarily agree to cost sharing contrary to the traditional cost sharing established by the Congress. In 1984 no funds were appropriated due to the no new starts policy. An appropriation of $500,000 is urged to initiate construction.

Ardsley.—Exclusion of funds from both the fiscal year 1983 and fiscal year 1984 budgets was again a result of the cost-sharing disagreement and the no news starts policy. The sum of $4.72 is requested.

Westchester County streams—Mamaroneck.—An appropriation of $700,000 is included rather than the budgeted amount of $300,000 in order to continue planning for channel improvements and diversion for flood protection.

Port Ontario.—This harbor of refuge represents one of New York's highest priority public access and safety needs for the Great Lakes fisheries program. Needed is $1 million to initiate construction.

Bird Island pier renovation.—This renovation will provide for safe angler access and use of an existing facility. There have been numerous drownings in recent years due, at least, in part, to the condition of the pier. Needed is $1.5 million to initiate construction.

Barcelona Harbor.—New York supports an appropriation of $1.6 million for improvement of the existing breakwater to meet harbor of refuge wave height requirements.

Moriches Inlet.—It is anticipated that construction will begin in fiscal year 1985 with the rehabilitation of the jetties. This must be followed by dredging of a navigation channel through an offshore bar. The project includes minor dredging which will connect the inlet to the intercoastal waterway. New York urges an appropriation of $1.569 million in fiscal year 1985 to complete the project.

Great Lakes to Hudson River Waterway.—Completion of this study which began more than 10 years ago is of great importance to New York State. We believe the barge canal system will play a major role in the future energy policies of the Northeast. We urge appropriation of $150,000 for continuation of this study.

Lake Ontario shoreline study.—The budget does not include any funds for this study in fiscal year 1985. We continue to support this reconnaissance effort on Lake Ontario and the St. Lawrence River which will provide alternative solutions for serious flood and erosion damage. An appropriation of $500,000 is recommended for fiscal year 1985.

Genesee River basin study.—The purpose of the study is to undertake a multipurpose reconnaissance effort to determine the feasibility of providing 97 megawatts of hydroelectric power at an existing Corps project, as well as providing flood protection and mitigating streambank erosion in the Genesee River basin. We support funding of $100,000.

CIVIL WORKS PROGRAM—ADDITIONAL FUNDS REQUESTED BY NEW YORK STATE FOR FISCAL YEAR 1985

Project/special studies	Type	Stage	Funds budgeted	Funds needed	Add'l funds req. by NYS
Section 214				$1,000	$1,000
NEWS				1,000	1,000
New York City ground water				440	440
Genesee River basin study				100	100
Subtotal				2,540	2,540
Flood control:					
Ellicott Creek	FC	Construction		3,300	3,300
Dansville	FC	Construction		500	500
Cattaraugus Creek	FDP	Surveys	$75	100	25
Tonawanda Creek watershed	FC	AE&D		400	400
Hackensack River basin study	FDP	Surveys	100	950	850
Passaic River basin study	FDP	Surveys	1,513	2,150	637
Westchester County streams—Mamaroneck	FC	Surveys	300	700	400
Ardsley	FC	Construction		4,720	4,720
South Ellenville	FC	Surveys		100	100
Fire Island to Montauk Point	FC	Reformulation		1,200	1,200
Subtotal			1,988	14,120	12,132
Navigation:					
Port Ontario	N	Construction		1,000	1,000
Bird Island Pier	N	Construction		1,500	1,500
Barcelona Harbor	N	Construction		1,600	1,600
Hamlin Beach small boat harbor	N	AE&D		150	150
Moriches Inlet	N	Construction		1,569	1,569
Great Lakes to Hudson Waterway	N	Surveys		150	150
Buttermilk Channel	N	O&M	1,093	1,763	670
East Rockaway Inlet	N	O&M	1,104	1,633	529
New York Harbor and adjacent channels	N	Surveys	870	1,800	930
Shinnecock Inlet	N	Eng. & design	100	350	250
Kill Van Kull Channel-Newark Bay channel	N	Planning		110	110
Subtotal			3,167	11,625	8,458
Beach erosion:					
Fort Niagara State Park	BE	AE&D		150	150
Lake Ontario shoreline	BE	Surveys		500	500
Subtotal				650	650
Total			5,155	28,935	23,780

NOTE: Funds needed estimated due to the Corps of Engineers having been directed not to release capability figures.

LEGEND: FC—Flood control; N—Navigation; FDP—Flood damage prevention; O&M—Operation and maintenance; AE&D—Advanced engineering and design; and BE—Beach erosion.

WATER SUPPLY NEEDS

Mr. WILLIAMS. I have a very brief statement.

Senator MATTINGLY. Would you introduce your colleague?

Mr. WILLIAMS. Bill Romer. He is a member of my staff of the Department of Environmental Conservation.

I came a little bit uneasy, Senator, when the gentleman from North Carolina referred to you as a kinsman, but we have some family from Georgia who go back over 100 years. So, I hope we can at least share some association in that regard.

Senator MATTINGLY. You have already gotten on the right side of me. [Laughter.]

Mr. WILLIAMS. As the record indicated, I am the commissioner of the New York State Department of Environmental Conservation. My department is New York State's water resources agency. I appreciate this opportunity to present New York's testimony this morning.

For many years, the civil works program of the Corps of Engineers has provided great benefits to all the citizens of New York through projects which relate to water supply distribution systems, flood and erosion control, and many other activities. Today, I want to highlight just a couple of Public Law 89–298 programs which have been very important to us in helping in our efforts to provide adequate water supply and delivery systems for all of our citizens.

First, the section 214 program has enabled us to develop fundamental information about the condition of our water supply infrastructure in both our large and our small communities all across the State. We are requesting $1 million for Federal fiscal year 1985.

Second, the Northeast water supply study called NEWS has explored the water supply needs of our New York metropolitan area as well as the lower Hudson basin and adjacent watersheds. We need $1 million in Federal funds in fiscal year 1985 to advance the recommendations that were set forth in the NEWS study as well as the Corps of Engineers action plan which are related to it.

In addition, we have submitted a list of some 25 projects that are very specific and these are studies and projects that are very important to the needs of the people of New York State. Eight of these projects are included in the President's proposed budget, but at levels which are insufficient to do the job properly. Even worse, no funds at all have been budgeted for the other 17 projects. I respectfully, and I strongly request an additional $22 million to adequately address the modest program which these 17 projects represent. I realize this $22 million seems very modest in comparison with the large numbers that the witnesses before me have used, running into the hundreds of millions, but these are projects that are very important to us.

Public Law 89–298 is, indeed, landmark legislation because it addresses the water supply needs of our great metropolitan areas. It also recognizes a proper role for the Federal Government in helping to solve the Nation's water supply problems. Public Law 89–298 authorized both section 214 as well as the NEWS study.

We must note, however, that the NEWS study which was completed in 1977, proposed further evaluations that would focus on issues relating to new-source developments. These issues include reassessments of the water supply deficit in view of recent drought experiences and changed population and growth projections, as well as reevaluation of a number of alternative solutions to environmental problems and all this is related to the preliminary work which is going on in connection with the important project of the third city tunnel in the city of New York.

Seven years have passed and the additional evaluations called for in the NEWS study have yet to be initiated. Funding for these additional studies and for review by the Corps of Engineers for construction drawings for city tunnel No. 3, pending further Federal involvement, is indeed needed now. Costs for this initial study are estimated at $15 million, of which we are requesting only $1 million for Federal fiscal year 1985.

Along the same lines, however, Report No. 98–308 on the fiscal year 1983 supplemental appropriations bill noted the conference committee's concern over the water supply problems of the greater New York area and directed the Corps of Engineers to address that situation. The Corps' work in this regard is called the New York metropolitan area water supply study and my department has cooperated very fully with the Corps of Engineers to develop an adequate response to the committee's charge.

We have reviewed the committee's draft and we believe it contains good information. However, we disagree with the conclusion drawn in the Corps of Engineers' testimony on February 8 at your hearings which suggests that the Hudson River project, that portion of the project dealing with the Hudson River, is only of local interest. Clearly, there should be no doubt that the problems and the solutions of a huge project such as the Hudson River project, including the third city water tunnel are regional, even national, in scope. Indeed, the Corps' very testimony at another place in the same record stated as follows and I quote, "The third tunnel minimizes the possibility of major system failure that would create extreme natural stress."

Incidentally, we urge release and publications of the December 23, 1983, report of the Corps of Engineers which was titled, "Greater New York Area Water Supply Update" just as soon as possible.

FLOOD CONTROL NEEDS

As we all know, severe weather just this past week produced flooding, loss of life, and significant property damage all the way from the Carolinas to New York and to New England. Flood damage occurs in some portion of New York State every year, particularly in the nearly 1,500 communities which are flood prone. Flood damage this past week, for example, will amount to scores of millions of dollars in New York State and serves to emphasize the serious problems facing many communities where Federal assistance is being sought.

The proposed civil works funding assistance falls far short of the amount necessary to support the planning and construction of local flood protection projects. Our requests for funding of such high-priority projects as those which are submitted in the record for the committee today are described individually and I am submitting them with my testimony.

Thank you very much. If you have any questions, I will be glad to address them.

Senator MATTINGLY. Thank you very much.

You are requesting an additional $22 million over the President's budget. Do you have any idea where the subcommittee might make corresponding reductions in the budget?

Mr. WILLIAMS. Yes, the President's budget allocates $5.1 million for the eight projects which I believe are referred to in my testimony as high-priority projects. We indicate the funds needed to support these projects adequately amount to $28.9 million. So the additional funds that we need are the $22.7 million, but that includes $2 million which I referred to separately as $1 million for section 214 and $1 million——

Senator MATTINGLY. You are asking for $22 million more. I just wonder if you knew where in this budget we might find $22 million to fund this work not included in the budget?

Mr. WILLIAMS. Same question our Governor asks people when they come before him, where are you going to shift the budget? We are all in competition for the important funds that are available. The people appearing before the committee over the period of hearing are coming forward to indicate how we can find these funds. These are important funds that need to be provided to serve these modest needs. I should point out, Senator, that if we look at the total record in terms of expenditures, we note that the entire system of New York City, over 40 percent of which was built before 1900 and has a replacement value in excess of $3 billion, was all paid for entirely by the citizens of New York City.

That infrastructure is in great need of replacement and great need of repair, and the expenditures that are going on for the third city tunnel alone amount to some expenditures over the next 10 years that New York City will pay of more than $2 billion. So this project that we are calling for, these lists of projects are very specific, they relate to relatively small activities all across the State and I believe they are strongly merited and indeed supported by the Corps of Engineers.

Senator MATTINGLY. Thank you very much.

GARRISON DIVERSION UNIT, NORTH DAKOTA—OPPOSITION

STATEMENT OF GERRY McKINNEY, COCHAIRMAN, UNITED CANADIAN-AMERICAN ANTI-GARRISON LOBBY

ACCOMPANIED BY DICK STEINBACH, AMERICAN COCHAIRMAN, UNITED CANADIAN-AMERICAN ANTI-GARRISON LOBBY, FROM NORTH DAKOTA

Senator MATTINGLY. Next, we have Gerald McKinney, cochairman of the United Canadian-American Anti-Garrison Lobby.

We will take all the documents and submit them for the record. If you would like you can briefly go through your statements.

[The statement follows:]

STATEMENT OF GERRY MCKINNEY, COCHAIRMAN, UNITED CANADIAN-AMERICAN ANTI-GARRISON LOBBY

Mr. Chairman, members of the committee, my name is Gerry McKinney of Winnipeg, Manitoba, Canada. I am currently cochairman of the United Canadian-American Anti-Garrison Lobby representing hundreds of thousands of Canadians and Americans in 180 organizations in our region of North America who are strongly opposed to the completion of the Garrison diversion project in North Dakota as now authorized (1965).

With the chairman's permission, I would like to ask that my statement, along with supporting data and materials, be printed in the hearing record. Thank you.

Mr. Chairman, I want to emphasize from the beginning that it is not the intention of the organizations I represent to interfere in the sovereign affairs of the United States as regards the Garrison diversion project in North Dakota. While we understand that the project is the subject of intense controversy in North Dakota, what you do within your own borders is properly your own concern.

When actions taken in your Nation cause a direct and adverse impact on the people and resources of our nation, however, then your actions do properly become an issue of our concern.

The Garrison diversion project would have a devastating impact upon the human and natural resources of the Canadian Province of Manitoba. It would severely damage, and possibly destroy, critically important commercial and sport fisheries in the 11,000 square mile fisheries in Lakes Winnipeg and Manitoba. In addition, it would have a critical impact upon our tribes of native peoples, who have depended upon substance fishing in the lakes for generations. Further, the authorized project would adversely impact water quality in rivers that flow from North Dakota to Manitoba, with serious impacts for municipal, industrial, and agricultural uses of that water.

It is very important that every Member of your Congress realize that the Garrison diversion issue was referred to the United States-Canadian International Joint Commission in 1975, and that the final report of the Commission was released in September 1977. The IJC concluded that the Garrison diversion unit "would cause injury to health and property in Canada" and recommend that portions of the project affecting Canada "not be built at this time."

The recommendation of the IJC, which your Government has promised to uphold, would effectively preclude development of approximately 80 percent of the authorized Garrison diversion unit.

The major issue of concern identified by the IJC was the issue of biotic transfer—the movement, via Garrison project waterways—of species of rough fish, fish diseases, and fish parasites from the Missouri River watershed in North Dakota, to the Hudson Bay watershed in Canada. The IJC concluded that such transfer would be irreversible, would not be known for about 10 years, and would threaten the existence of Canada's largest commercial year-round fishery, with related annual losses of $40 million annually. The report stated:

"The commission further concludes that while most of the impacts can be mitigated, those from possible biota transfer are so threatening that the only acceptable policy at present is to delay construction of those features of the Garrison diversion unit which might result in such transfers."

The Commission added: "Overriding everything else, as it turns out, has been the necessity that such introduction be prevented at all costs."

Project supporters, who have previously promised not to damage Canadian interests through the project, first reacted by trying to ridicule the IJC's report. When that did not work, they then said they would simply build portions of the Garrison unit that did not affect Canada, now known as phase I.

Mr. Chairman, I contend that you have built as far as you can go without directly addressing the report of the IJC. Remaining project features, in my opinion, either would affect Canada—or could be justified only by later building subsequent features that would affect Canada.

The U.S. Environmental Protection Agency in reviewing the draft supplemental environmental impact statement on features of the Garrison diversion unit, for initial development of 85,000 acres of irrigation (phase I), stated: "We are, however, skeptical that a closed system can be successfully designed and operated in areas which do not drain naturally to the James-Missouri River basin. . . . We are concerned with the frequent references in the draft supplemental EIS to these irrigation areas as possible future additions, despite their potential environmental problems and implications to Canada."

Mr. Chairman, in addition to the previous comments, I would refer you to the following:

(1) May 27, 1983—The Environmental Protection Agency statement re Garrison.

(2) Jack Anderson's column—"Garrison Promoters Use Laundered Data To Push Garrison in Congress."

(3) Typical editorials from U.S. daily newspapers and abroad critical of Garrison.

(4) Canadian Parliament debate calling for a halt to the Garrison project.

(5) Response of the Government of Manitoba to a recent statement of the Governor of North Dakota.

We here in this region of North America, and particularly Manitoba, rely heavily on our fisheries, agriculture, and food processing industries to survive economically. I would respectfully urge you—on behalf of the 59 Indian bands, 6,000 fishermen, the Northern Association of Community Councils representing 50 remote northern Manitoba communities, the Canadian National Farmers Union, the Manitoba Federation of Labour, the Manitoba Government Employees Association, the Manitoba Metis Federation, the Brandon University Students Union, the University of Winnipeg Students Association, our wildlife associations, and numerous other groups that funding for the current authorized version of the Garrison project be halted and the entire project be sent back to the drawing board for a complete review.

Let us not have Garrison construction as yet another crisis-flashpoint in the current friendly relations between our two peoples.

We welcome past reassurances to our governments of both Canada and Manitoba, but, unfortunately, project promoters continue to boast of their determination to build the complete project—they do not care what happens to our watershed or our people. Therefore, we would urge you to put statesmanship ahead of the interests of a few promoters of a bad project in North Dakota.

Let us work together to build the basis for understanding and cooperation on our jointly shared waterways. Let us uphold the true meaning and intent of the 1909 Boundary Waters Treaty which says: "It is further agreed that the waters herein defined as boundary waters and waters flowing across the boundary shall not be polluted on either side to the injury of health or property on the other."—Article IV.

Thank you.

LETTER FROM STEVEN J. DURHAM, REGIONAL ADMINISTRATOR, ENVIRONMENTAL PROTECTION AGENCY

MAY 27 1983

Ref: 8PM-EA

Mr. J. B. Marcotte, Jr.
Bureau of Reclamation
P.O. Box 2553
Federal Office Building
316 N. 26th Street
Billings, Montana 59103

Re: Draft Supplemental Environmental
Impact Statement on Features of
the Garrison Diversion Unit for
Initial Development of 85,000 Acres

Dear Mr. Marcotte:

We endorse the latest proposal to develop a "closed system" which eliminates direct or indirect flows of Missouri River Basin water to the Red and Souris Rivers (Hudson Bay Drainages). We are, however, skeptical that a closed system can be successfully designed and operated in areas which do not drain naturally to the James/Missouri River Basins. These questionable areas, as included under Plan 1 are: Middle Souris (103,800 acres), Karlsruhe (12,200 acres), Warwick-McVille (47,220 acres), parts of New Rockford (the number of acres affected is unknown), and East Oakes (25,320 acres). We are concerned with the frequent references in the draft Supplemental EIS to these irrigation areas as possible future additions, despite their potential environmental problems and implications to Canada.

Given our current knowledge about the environmental risks associated with supplying Missouri River water to these areas, we cannot support construction of any aspect of Plan 1 which would accommodate their development. Our endorsement of the remaining aspects of Plan 1 must be qualified, however, based on the Bureau of Reclamation: 1) committing to a course of action which eliminates these questionable areas and their project components from further consideration under the Garrison Diversion Unit; 2) for those acceptable aspects of the project, reaching agreement with relevant state and federal agencies regarding the proposed plans for mitigating fish, wildlife, and vegetation impacts; 3) expanding the project scope and coverage under the EIS to include the Garrison extension in South Dakota; and 4) receiving from the North and South Dakota water quality bureaus, written confirmation that the entire James River project will not violate either State's water quality standards.

We believe the Bureau can develop an environmentally acceptable project which reasonably utilizes the potential capacity of the Garrison Diversion Unit by providing water to irrigation areas along the James River, both in North and South Dakota. It is our preference that the scope of the project be modified to include the Garrison Extension in South Dakota and that the project components within Canadian drainages be dropped. The EIS should address the impacts of a project designed to serve the entire James River Basin, not just the North Dakota portion.

Based on our concerns and assessment of the draft EIS, we are assigning an ER-2 rating to the draft. Please do not hesitate to call or set up a meeting to discuss our reservations and concerns. Terry Anderson is the principal reviewer for this project and he can be reached at FTS 327-2351. We have attached specific comments which we believe should help you revise the existing EIS.

Sincerely yours,

Steven J. Durham
Regional Administrator

Attachment

cc: Lawrence F. Parsons, Bureau of Reclamation, Bismarck, N.D.
Gene A. Christianson, N.D. Environmental Control
Warren R. Neufeld, S.D. Dept. of Water and Natural Resources
Pasquale A. Alberico, EPA, Office of Federal Activities

DETAILED COMMENTS ON THE DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT ON FEATURES OF THE GARRISON DIVERSION UNIT FOR INITIAL DEVELOPMENT OF 85,000 ACRES

1. The Environmental Impact Statement presumes that Plan 1 in FES 79-7 is still the best option and the Bureau should proceed to construction on those project components which are not objectionable. We do not agree with either the assumption or the approach outlined in the Supplemental EIS. Instead we strongly believe the Bureau must evaluate another option before proceeding with any construction plans. That option entails eliminating all project areas under Plan 1 which naturally drain to the Souris and Red River Basins (Hudson Bay Drainages) and adding the Garrison extension in South Dakota. We believe this option retains the best features of Plan 1 and will allow the Garrison Diversion Unit to be developed to its full potential. Because this option has not been evaluated in any of the EIS's prepared to date, and since this option may affect the sizing of Lonetree Reservoir, New Rockford Canal, James River Feeder Canal, the outlet to the James River Dike and possibly other project features, we suggest all other planning cease until analysis of this option and feasibility studies for the Garrison extension are completed. The evaluation of this option should be presented in another draft EIS and circulated for review.

2. The report discusses two options for capturing the return flows from New Rockford irrigation area and draining this area to the James River rather than allowing it to drain naturally to the Sheyenne River (see pages II-7 and 8). It is not clear how this proposal will be successful, since Map 769-603-17545 does not show where the natural boundary between the James River and Sheyenne drainages occurs. Apparently the boundary shown on the map is not the true natural boundary but rather the result of intercepting the natural flow in Robinson Coulee and redirecting it to the James River. The map does not show any contours so it is not possible to visualize how the natural drainage is being altered. The report does not discuss how irrigation of this area will be controlled to ensure land owners will not irrigate lands which drain to the Sheyenne River or that runoff will be entirely intercepted. Due to these deficiencies we are not confident water will be successfully drained to the James River Basin. Therefore, we suggest further analysis of this proposal which compares specific parcels of property, by owner, to the proposed irrigation areas and the natural drainage. The EIS should provide a map which shows these property and natural drainage boundaries, in addition to the drainage areas once the project is constructed.

3. We believe the elimination of the fish screens at the upstream end of McClusky Canal is unwise due to the proximity of both the canal and Lonetree Reservoir to the Sheyenne River (see page II-10). We cannot conceive of a

program which will adequately police human and wildlife activity along the canal and at the reservoir to prohibit transfer of undesirable fish species to the Sheyenne drainage. Also, we agree with the conclusion "screening all flows leaving an irrigation area would not be possible...because of storm and flood flows in these drainages".

4. The EIS is not always clear about what features of Plan 1 are proposed for construction and are covered as part of the Supplemental EIS or prior EIS's. This confusion could be easily resolved if a summary table were added to the beginning of the EIS which listed all the project features of Plan 1 and identified the status of each including which EIS contains the most recent discussion of impacts. The table should indicate whether the project feature has been constructed, is under construction, still requires further analysis or has been dropped from further consideration.

5. Table 3-1 on page III-5 does not define what is baseline - does baseline refer to actual field conditions or does it measure the number of acres which will exist if Plan 1 were constructed exactly as described in FES 79-7. The DSEIS should present two tables, one which summarizes changes to the number of acres of wetlands compared with Plan 1 and the other one which presents changes in wetland acreage compared to existing conditions. The EIS should be very clear about what project features are resulting in the impacts summarized in these tables. This kind of distinction needs to be made throughout the report whenever impacts are discussed or summarized; that is, are the impacts due to one feature, the entire project, or what?

6. Paragraph 4 on page III-12 states:

> "Total dissolved solids (TDS), sulfates, and hardness will be moderately increased, but extremely high values experienced historically will be reduced and possibly eliminated as a result of project-related flow augmentation. These changes from historic conditions do not preclude any present or future intended uses."

This statement is extremely general and does not accurately summarize the data presented in Appendix 5. Contrary to the statement, several examples of extreme highs which will not be moderated by the project are depicted in the figures and tables for the three stations along the James River for which data is presented: ND/SD border; Columbia, SD; and Huron, SD. The same kind of data and analysis should be presented in the EIS for upstream stations, preferably above and below Jamestown Reservoir and Dam. The previous water quality analysis should be updated to include data acquired since the FES 79-7 was published and to reflect changes in project operation and flows in the James River. The analysis of surface water quality impacts should be expanded to include existing data and projections for nitrogen and phosphorus. The EIS should also present data on existing concentrations of pesticides and herbicides. All of these parameters are associated with agriculture and their concentrations may change as a result of the proposed irrigation.

A major deficiency in the proposal is the lack of a prescribed water quality monitoring program which will directly measure water quality changes resulting from the project once it becomes operational. A monitoring program should be an integral part of the project and the EIS should describe the details of such a program. The description should identify station locations, a list of parameters to be sampled, frequency of sampling by station and by parameter, and parties responsible for data collection and analysis. Collecting data on pollutant loading from irrigation return flows should be a major part of the monitoring program. Groundwater monitoring and impacts should be included in the discussion, as well.

The last sentence of the above quotation needs to be supported by written confirmation from the North Dakota and South Dakota water quality offices. The confirmation should be added to the EIS as an appendix.

7. The discussion on page III-15 with regard to Taayer Reservoir indicates that Taayer Reservoir still will be constructed for flow regulation purposes even though the East Oakes irrigation area will not be constructed at this time or possibly may never be constructed due to problems controlling runoff to Wild Rice River. We question the need for Taayer Reservoir and recommend that other alternatives be investigated which can regulate flows in the James River. We believe that Kraft Slough has a higher value as a natural wildlife area than it will have once the reservoir is constructed. We are especially concerned about water quality of the slough, mixing it with irrigation return flows and then adding this mixture to the James River. The EIS should evaluate the impact of these return flows on the water quality of the James River.

8. It may be possible to stock Lonetree Reservoir with fish species which are compatible to species found in the Hudson Bay river basins. We suggest pursuing this option with the Canadian government and the State and Federal Departments of Fish and Wildlife before eliminating entirely recreational fisheries in the reservoir (see page III-32).

9. The USBR applied for a NPDES permit to discharge saline water from the McClusky Canal into Painted Woods Creek. EPA's response (copy attached) indicated our intention to deactivate the application provided the Bureau provides the following information: "(1) a list of all potentially adversely affected public and private entities, and (2) a description of the actions the Bureau is taking to negate any adverse effects of the discharges on the parties." The Supplemental EIS should discuss the problem which prompted the permit application and present its response to the above two requests.

Among the items the Supplemental EIS should address in this regard are: (1) what is the source(s) of the saline water, (2) can it be prevented from entering the canal, (3) how will additional irrigation in the vicinity of the saline sources impact (through deep percolation and/or surface return flows) the quality of the surface/ground water system, (4) what is the construction schedule for Lonetree Reservoir and what impact will the water quality of the McClusky Canal have on the reservoir, (5) how will the water quality problems be handled if, for one reason or another, construction of Lonetree is delayed or deferred, (6) what are the water quality impacts of the discharges from the McClusky Canal on the current surface and groundwater in Painted Woods Creek System, (7) what are the hydrologic and hydraulic impacts of the discharge (i.e., flow regime, channel characteristics, sediment transport), and (8) can any other adverse impacts identified above be prevented and/or mitigated?

10. Page V-13: The Bureau will need to apply for a 402 permit to cover any point source discharges (e.g., dewatering) which are not covered by a 404 permit. A statement should be added to the EIS to clarify this point.

Also this section indicates that this ES is not intended to meet the requirements of Section 404(r) although such an exemption was sought in FES 79-7. This section goes on to state that any features not previously covered in FES 79-7 will be covered under specific permits. This procedure raises several concerns. The 404(b)(1) guidelines were revised on December 24, 1980. The evaluation contained in FES 79-7 should be reviewed by the USBR and updated if necessary. Secondly, Section 404 seems to envision a process where a project is either covered by a 404(r) exemption or subject to specific permits. The Supplemental ES covers many of the same features covered by FES 79-7 making it difficult to determine which features would be subject to specific permits. We suggest the USBR decide to either seek an exemption or obtain specific permits, but not both.

11. To reiterate a concern we have expressed before, we do not think the Habitat Evaluation Procedure (HEP) adequately measures the value of one wetland area compared to another. Our concern is based on the procedure relying on a limited number of animal species (mostly birds) to determine the habitat value of each wetland area. We believe that application of this procedure may not preserve the many other functions which wetlands provide.

Although we do not think one wetland can be equated exactly with another wetland, we request that the water quality related functions which are lost due to the project be replaced with wetlands that provide the same functions. It is not clear whether the proposal in the draft Supplemental EIS will accomplish this objective. The agreement reached with the Fish and Wildlife Service should include this provision and should be made a part of the EIS.

[From Washington Merry-Go-Round]

UNDER ATTACK, WATT'S POLICIES REMAIN UNCHANGED

By JACK ANDERSON

WASHINGTON — Interior Secretary James Watt has been keeping in his bunker, his head 1 inch below the purge line, to avoid the political backfire from his latest gaffe.

But he has lost none of his enthusiasm for assaulting nature. He is occupied with the conquest of the wilderness, not its preservation.

Watt's bulldozers are not only threatening irreplaceable wildlife refuges in this country, but they're on a collision course with Canadian interests as well. Egged on by North Dakota politicians out to please their rural constituency, Watt has quietly awarded the first contract for an irrigation project known as the Garrison Diversion Unit. Phse I involves construction of most of the components.

What is planned is a massive network of dams, reservoirs and canals that will move Missouri River water from Western North Dakota to the north central part of the state. This would irrigate farmland near the Canadian border.

The project is of questionable economic value, to put it charitably: At a cost of $1.2 billion, Garrison will irrigate 1,200 farms at most. That's an average cost of $1 million per farm.)

Its boondoggle aspect aside, Garrison has created a storm of protest from Canada. Manitoba's multimillion-dollar fishing industry faces irreversible damage from the introduction of alien Missouri River fish species and parasites into Canadian waterways.

To assuage the Canadians' wrath, the Interior Department has decided to pare down the 250,000 acre project that was originally planned. But Canadian officials suspect that political pressure will force construction and use of the whole irrigation maze, with its harmful impact on Canadian rivers.

Internal documents seen by my associates Corky Johnson and Donald Goldberg indicate that the Garrison boondoggle will have a drastic impact on the environment. In its entirety, it would destroy 130,000 acres of wetlands and grasslands that provide food and shelter to perhaps a half-million waterfowl and marsh birds each year.

Interior officials maintain they will "mitigate" any loss of acreage, in part by a cockamamie scheme to create new wetlands by pumping water onto prairie grasslands. In fact, in their latest environmental impact statement, officials claim that the Garrison project will "add quality and quantity to the habitat base."

But internal department memos, intended for official eyes only, show that Watt's ditch-diggers have blatantly manipulated or ignored scientific data supplied by the team of biologists assigned to the Garrison project.

One Garrison scientist complained that the model used to obtain environmental impact data contained "bogus" information. While the numbers in the resulting evaluation added up, he wrote, "the biology behind them is extremely suspect."

Another memo said the Garrison biological assessment was "two steps removed from reality." Still another biologist wrote that officials' claims of a net gain for wildlife were "ludicrous." All three biologists signed a report complaining that the department's "mitigation" plan was based on data that they hadn't even seen nor approved. Interior Department sources said it is commonplace for scientific information to be "laundered" or manipulated to political needs.

A memo written by an aide to North Dakota Gov. Allen Olson indirectly alluded to the political reality of the Garrison project, saying: "I had a very skeptical feeling that we were still going to be sandbagged unless we somehow methodically controlled the technical exercise associated with developing the final mitigation plan . . . And am convinced that we have to dominate this process."

The North Dakota governor has a powerful ally in Washington. Watt sent a letter to Olson confirming the go-ahead on Garrison even before the mitigation plan was completed. At the end, Watt scribbled a personal note: "A staff-prepared letter — if not OK, call me. Jim."

[From Bismarck Tribune, Sunday, Dec. 26, 1982]

GARRISON PROJECT CHANGE NEEDED

It's time to take a good, hard look at Garrison Diversion.

It almost doesn't matter that Garrison survived a recent House-Senate conference committee test.

Clearly, Garrison has lost political support in the House, which, only five days before the conference committee met, voted to cut funds 252-152.

The project is not likely to recoup much House support in the foreseeable future.

At the very best, Garrison's promoters will be able to work lose crumbs for funds. At the worst, Garrison won't be so lucky next time.

BUT CONGRESS isn't Garrison's only problem.

Aside from Congress, Garrison still finds:

- Stronger Canadian opposition than ever, based on fears of harm to Manitoba's fishing industry.
- Opposition from environmental groups, who aren't likely to ease their stands on water development in North Dakota unless they perceive a better shake for wildlife and wetlands.
- Renewed opposition by North Dakota farmers to a wildlife mitigation plan. Many landowners see Garrison as a project that takes from one set of farmers and gives to another, and many believe there is too much land in public ownership now.

The point is, as constituted, the Garrison plan continues to meet objections at every turn.

IT HAS BEEN nearly 30 years since Garrison Dam was completed, and this state still has no water project. At that rate, no living North Dakotan will see a completed project.

Garrison's supporters have stuck to their guns long past the time they should have tried to compromise and get a project moving forward, and it is time we faced political realities.

We should also realize that, more important than a specific water project outlining a certain number and location of acres, Garrison Diversion is an idea.

The idea is this: North Dakota has all this water in one place, doing itself little good. The best thing to do is to move that water and put it to better use.

The idea always has been and still is sound, and the idea should be implemented.

Furthermore, North Dakota has a right to a water project for agreeing to flood out more than half a million acres to create Lake Sakakawea and prevent flooding of downstream states.

But, that doesn't mean the state has a right to this particular project. It means the state has a right to compensation by whatever project or projects are acceptable to a wide array of interests.

For years, this newspaper has supported the authorized project in its editorials, believing that the 250,000-acre project was good and merely the first phase of a much bigger water plan.

THE REASON we've come to this conclusion is that it's time to make measureable progress on a water project for North Dakota, rather than continue to get very little.

What is an acceptable alternative?

We can't say for sure. That's something to be planned out by our State Water Commission and the Bureau of Reclamation.

But here are some ideas:

If we agree to deauthorize Garrison, perhaps the feds would finance a municipal and industrial water pipeline project not only for the southwest area of the state, but for the eastern part as well.

Even that project would not fully compensate for flooding the Missouri River bottomlands.

The state should push, then, for federal financing of some of the items in the huge 1983 State Water Plan the Water Commission is presenting to the Legislature.

Let's come up with something everyone can agree on and do it. Having some water project is a whole lot better than sticking to a principle and having none.

Our politicians should show the leadership required and admit that big changes are needed for this state to get the uses it deserves out of its water.

[From Devils Lake, (N. Dak.) Journal, Monday, June 6, 1983]

TIME TO REEVALUATE NORTH DAKOTA'S GARRISON DIVERSION

Members of Congress are queuing up for their annual Pork Barrel Polka. A featured guest at this year's event will be the Garrison Diversion Project in North Dakota. The administration has asked $22.3 million to finance Garrison in fiscal 1984. The amount, up from $4 million in 1983, suggests work on the project finally is accelerating after years of delay and reduced funding. Anti-pork crusaders will fight to delete the funds. They need help, especially in the Senate.

Garrison is a $1-billion project to irrigate 250,000 acres in central and eastern North Dakota. The idea is to repay North Dakota for agricultural land lost to Missouri River flood-control projects. But critics claim the diversion will destroy more than it will create.

The Audubon Society says the diversion will destroy or seriously damage a dozen wildlife refuges in one of the nation's "richest and most productive wildfowl areas." It will also obliterate 60,000 acres of prairie wetlands and 43,000 acres of native prairie and rangeland. Canada vigorously opposes portions of the project that will send Missouri River water into the Hudson Bay watershed. The Canadians fear that trash fish and parasites from the Missouri river system could destroy Manitoba's fishing industry.

Last year the House almost succeeded in shutting Garrison down. At the urging of Rep. Silvio Conte, R-Mass., it voted 252-152 against further funding for the project. But the Senate restored the funds, and House conferees bowed to Senate pressure.

This year, Appropriations Committee Chairman Jamie Whitten, D-Miss., and his allies have intricately choreographed Garrison's part in the polka. To avoid another House defeat, the House energy and water project appropriation contains no money for Garrison. The porkers have left it to North Dakota Sens. Mark Andrews and Quentin Burdick to add the $22.3 million when the bill reaches the Senate in mid-June. Most likely the Senate will embrace Garrison and the House will again go along to avoid retaliation against projects others in Congress seek.

Garrison originally was authorized in the Flood Control Act of 1944, and was reauthorized in 1965. Since then things have changed. The price of the project has quadrupled, environmental sensibilities have matured and agriculture has suffered wrenching economic changes. Critics argue that Garrison is no longer necessary or wise. Yet if Congress continues to appropriate funds for Garrison in small annual dollops, stopping the project will soon cost more than pressing ahead.

Congress should reevaluate the needs that Garrison is supposed to meet. Perhaps North Dakota's present-day requirements can be served by a redesigned, scaled-down project that avoids polluting Canadian waters and also minimizes destruction of wildfowl habitat. The first step is for the Senate to refuse the administration's $22.3 million funding request for 1984.

[November 2, 1983—Common Debates]

PROCEEDINGS OF CANADIAN LEGISLATURE

Garrison Diversion

PRIVATE MEMBERS' BUSINESS—MOTIONS

[*English*]

ENVIRONMENTAL AFFAIRS

GARRISON DIVERSION—SUGGESTED MEASURES TO PROTECT ENVIRONMENT OF MANITOBA

The House resumed, from Monday, February 9, 1981, the motion of Mr. Sargeant:

> That, in the opinion of this House, the Government should consider the advisability of taking those measures necessary to ensure that there is no damage caused to the Manitoba environment by the completion of the Garrison Diversion Unit in the State of North Dakota and, that such measures to be considered could include:
>
> 1. The convening of a joint meeting between provincial, state and federal authorities affected by the Garrison project;
>
> 2. The offer of legal and technical assistance to those citizen's groups in Canada now attempting to halt the progress of the Garrison Diversion; and
>
> 3. The bringing to trial in the World Court, the government of the United States, should Canada be unsuccessful in its efforts to receive satisfactory assurances regarding the future safety of her environment.

Mr. Dan McKenzie (Winnipeg-Assiniboine): Mr. Speaker, this motion refers to the Garrison Diversion project and addresses suggested measures to protect the environment of Manitoba. The first measure set out in the motion is as follows:

> 1. The convening of a joint meeting between provincial, state and federal authorities affected by the Garrison project;

It is too late for that, Mr. Speaker; it has been done many times over the past few years.

The second measure set out in the motion is as follows:

> 2. The offer of legal and technical assistance to those citizen's groups in Canada now attempting to halt the progress of the Garrison Diversion;

We are far too late for that, Mr. Speaker. It has all been done years ago.

The third proposal set out in the motion is:

> 3. The bringing to trial in the World Court—

We do not have time for that either. The United States has made it perfectly clear that it is going to complete the Garrison Diversion project, and it has started work on the Lone Tree section of the project without consultation with Canada.

I have called on the Prime Minister (Mr. Trudeau) to contact the President of the United States personally to discuss the Garrison Diversion project and get assurances that it will not continue without further consultation.

I will go into details in a moment of where the United States, especially North Dakota, has made it perfectly clear that it is going to complete the diversion plan. We have been told that a fish screen is to be installed to act as a barrier. The report of the International Joint Commission indicated the commissioners simply did not believe that a workable and reliable fish screen could be developed. It wrote:

> It is doubtful that the McClusky Canal fish screen even with modifications would be a reliable and effective barrier to the transfer of foreign biota from the Missouri River to the Hudson Bay drainage basin.

A lot of studies have been done on this fish screen. We do not know who is right and who is wrong, but they are proceeding with it regardless.

I want to make some comments about the Republican Senator, Mark Andrews, of North Dakota. He has described Canadian objection to the controversial Garrison water diversion project as a bogeyman and red herring. He stated that the decision to build this project was not going to be made in Canada and that it would not be made in Washington but in North Dakota. He said that if people there can get their act together, they will have it. There could be no statement plainer than that, Mr. Speaker, to indicate that Senator Mark Andrews will do everything in his power to see that the Garrison Diversion is completed.

I have debated this subject in the past with Senator Andrews who is known to his colleagues as "the king of pork". He persuaded a House-Senate conference committee to reinstate a water diversion project after it had been overwhelmingly defeated in the House of Representatives.

Congressman Silvio Conte stated publicly in Washington that the Senators knew that they must vote in favour of these moneys for Garrison or risk having Senator Andrews put a halt to their own projects. He is determined to have the diversion project completed, Mr. Speaker, regardless of whether we go to the World Court or whatever.

I debated this subject with Senator Andrews at a Canada-U.S. parliamentary meeting in Calgary in 1979. At that time he made a number of statements which I subsequently had Environment Canada check. In a letter to me on September 27, 1979, an officer of the Department stated:

> In reply to your question I think Congressman Andrews has either completely missed the point of our objections or is trying to sidestep them. The main thrust of our concerns, and this is a problem that was identified by the International Joint Commission, is that the Garrison Diversion Project would introduce into the Red River drainage biota not naturally found there.

I was given a detailed answer of places where Senator Andrews had misled the discussions at the Canada-U.S. parliamentary meeting.

The Attorney General for North Dakota has said that construction of the Garrison Diversion project will not be stopped by the Canadian Government or by the IJC if the United States determines that the project is in the United States' best interests. He said that the bottom line is that the project will be built if the United States Government decides it is in its best interests. That is what the Attorney General of North Dakota, Walter Wefald told a University of North Dakota law class in 1982. You can see the determination to complete the project and why the motion that we are debating today has come too late.

When the Hon. Member for Selkirk-Interlake (Mr. Sargeant) introduced his motion on February 9, 1981, he said:

> We in Manitoba have not been reassured in the past with regard to the government's concern about the Garrison diversion project.

NDP provincial Governments in the past have not shown a proper regard for this, Mr. Speaker. They have sat back while the project went full speed ahead.

Following a tour of diversion sites and meetings with American officials, the Manitoba Conservative caucus concluded that key data on the Manitoba situation is missing from American studies and that Manitoba apparently is relying exclusively on these studies for its protection. As a result, the Conservatives called on the NDP provincial Government to do a complete environment impact study, itself. The NDP claimed that no such independent study was necessary because both countries were working amicably on the full range of environmental impact reviews. In addition, Manitoba has a pledge from the U.S. State Department that the Americans will abide by their treaty obligation and do nothing to pollute Canadian waters.

I have just pointed out what the Attorney General of North Dakota stated and what Senator Mark Andrews stated—they are going to complete the project.

The Leader of the Manitoba Conservative Party stated that the Government's reliance on another jurisdiction to protect Manitoba's interest is a gross dereliction of duty. He was referring to the NDP Government of the day. It sat back while North Dakota was proceeding full speed ahead with the diversion project.

The North Dakota Senate commended a former NDP premier of Manitoba for not attempting to stop the Garrison Diversion project. How naive can we be, Mr. Speaker.

A Member of the United States National Audubon Society, Richard Madson, said in an interview that the former NDP Premier of Manitoba received a letter: approved by both the United States Senate and the legislature of North Dakota, which thanked him for not backing a proposal to finance court action against the project. The former NDP Premier of Manitoba had taken this action although the State of Minnesota had come to the conclusion that litigation was the only way to stop the project in time. This former premier now lives across the street from the Prime Minister, Mr. Speaker.

It was reported in the *Winnipeg Free Press* that at a time when Minnesota was wisely implementing legal action to protect the rights of its citizens to a clean and healthy environment, the former Manitoba NDP Premier not only blocked such action on the part of Manitobans but received a commendation from the very individuals promoting the development which will degrade the quality of Manitoba's environment. The resolution of commendation from the Garrison promoters is an incredibly clear indication of just how completely the former Manitoba NDP Premier and his caucus had failed in their elected responsibilities to protect the interests of Manitobans.

● (1550)

In October of 1982, the *Winnipeg Free Press* reported that the Manitoba NDP Government spent more than $86,000 that year on its fight against the giant North Dakota Garrison irrigation project without reaping any tangible evidence of success. That includes more than $20,000 in legal bills from a Washington law firm and expenses for a Crown attorney to lobby Congressmen on Capital Hill. The NDP Government has hired more people, spent more money and published more pamphlets, yet has not been effective in halting the Garrison Diversion project, and by the time we go to the World Court to debate the Garrison Diversion project, it will be completed.

If Garrison proceeds, a multimillion dollar Canadian industry will be destroyed simply by changing the direction in which that river water flows. North Dakota is bisected by a height of land or divide. North of the divide, water runs north to Hudson's Bay through the Hudson's Bay drainage basin. Land south of the divide is in the Missouri River drainage basin. The two drainage basins have been separated since the last ice age. Each has developed its own kings of fish. For the first time, because of the Garrison project, the Missouri River water flow north across the divide. With the water would come fish and fish eggs, as well as parasites and diseases which do not now exist in the Hudson's Bay drainage basin.

Use of this water to irrigate land in this basin would enable Missouri fish to move north into Canada. The International Joint Commission investigated the Garrison Diversion project. The Commission warned that the introduction of foreign species of fish into Lake Winnipeg would result in major reductions in the more highly valued species. Whitefish, walleye and sauger populations could decrease 50 per cent to 75 per cent. This would wipe out the commercial fishery. The IJC further stated that while most of the impacts can be mitigated, those from the possible Biota transfers are so threatening that the only acceptable policy at present is to delay construction of those features of the Garrison unit which might result in such transfers. Furthermore, if this project proceeds, it will violate the 1909 Boundary Waters Treaty, which reads:

> —waters herein defined as boundary waters and waters flowing across the boundary shall not be polluted on either side to the injury or health or property on the other.

I suggest again, Mr. Speaker, that the Prime Minister of Canada contact the President of the United States and launch an official protest. I understand a report came out of Minneapolis last week that a note was sent recently to Mr. Schultz in the United States. We have been sending notes, having little meetings and writing letters for about seven or eight years, but the project is still being continued. As I pointed out earlier, Senator Andrews and the Attorney General have made their positions perfectly clear. They are going to complete the Garrison Diversion project regardless of what is going to happen to Canadian waters.

I reiterate, Mr. Speaker, we have gone beyond the point of funding little groups to study the matter and going to the World Court. The Prime Minister will have to take a position on this immediately and contact the President to ask him if he will investigate and report back to the Prime Minister on whether he will be able to stop this project and make sure that Canadian waters are protected.

Mr. Bill Blaikie (Winnipeg-Birds Hill): Mr. Speaker, I am pleased to be able to participate in the debate today on Motion No. 25, a motion which was put forward by my colleague, the Hon. Member for Selkirk-Interlake (Mr. Sargeant), and seconded by the Hon. Member for Winnipeg North Centre (Mr. Knowles). This is a motion, as we know, which has to do with the Government's responsibilities as they relate to Canada's intervention in the North Dakota Garrison Diversion unit.

Perhaps I should first make some reply to the remarks made by the Hon. Member for Winnipeg-Assiniboine (Mr. McKenzie). Mr. Speaker, I wonder if I could have a little order over there.

[*Translation*]

The Acting Speaker (Mr. Corbin): Order, please! The Chair has also noticed that the noise level is perhaps somewhat higher than usual in the House. It is probably due to the excellent attendance on the part of Hon. Members. However, I believe that we should listen closely to the speech of the Hon. Member for Winnipeg-Birds Hill (Mr. Blaikie).

[*English*]

Mr. Blaikie: We are not used to having so many Liberals in the Chamber all at one time, Mr. Speaker, except for votes, and those Hon. Members are not used to it.

I would like to reply, Mr. Speaker, to the remarks made by the Hon. Member for Winnipeg-Assiniboine, who has responded with his usual generosity of spirit and lack of respect for the facts. He has taken it upon himself to violate one of the most important features of the struggle against the Garrison Diversion unit, that is, the non-partisan nature, the unanimity with which Manitobans have tried to prevent this environmental disaster from ever becoming reality. The Hon. Member for Winnipeg-Assiniboine has disregarded the power of that unanimity and sought to score cheap political points, mainly by referring to supposed or alleged inaction on the part of the former New Democratic Government which was in power prior to 1977 and was defeated in October of 1977. What the Hon. Member for Winnipeg-Assiniboine failed to point out was that until late 1977 all Manitobans were waiting for the report of the International Joint Commission on the Garrison Diversion project. At that point in time there was still reason to believe that whatever judgment that body made would be respected by the Americans.

We learned later, in 1978, that that was not the case. For the next four years, after we had the report of the International Joint Commission, we had a Progressive Conservative Government in Manitoba which did virtually nothing. It put all its faith in diplomatic relations with the United States. That Government said that because of our good neighbour to the south we had nothing to worry about. It displayed that usual uncritical attitude toward the United States, which did not serve it in good stead, Mr. Speaker. However, I am glad to see that the Hon. Member for Winnipeg-Assiniboine is finally on board, that he finally has a mature attitude toward the way in which the United States of America acts when its own self-interests are involved. Finally we hear from a Conservative Hon. Member talking about a Republican in North Dakota and saying, that when it comes down to it, the United States acts in its own self-interests. That is the bottom line of American foreign policy. It is refreshing, indeed, Mr. Speaker, to hear that kind of mature analysis coming from a Progressive Conservative Member of Parliament. That is something one can welcome hearing.

I hope I have now corrected the record for the benefit of those Manitobans who may be listening to this debate, who will actually know themselves that the present Government of Manitoba is doing more than the previous Progressive Conservative Government to stimulate public opinion, opposition and knowledge about the Garrison Diversion project. In the end, this is going to be one of the crucial ways in which we oppose this project, by making people aware of this concern and by doing everything we can to bring about an end to that project.

The motion currently before the House says that the federal Government:

> —should consider the advisability of taking those measures necessary to ensure that there is no damage caused to the Manitoba environment by the completion of the Garrison diversion unit—

The important word here, Mr. Speaker, is "completion", because the completion of the Garrison Diversion Unit, as the Member for Winnipeg-Assiniboine pointed out, means a melding of the Missouri River drainage basin with the Hudson's Bay drainage basin. This is of crucial concern. What is being proposed by the State of North Dakota and the United States Department of the Interior in respect of the Garrison project is indeed mind-boggling and a glaring tribute to the misplaced vanity of man. This Promethean project aims to irrigate about 250,000 acres of North Dakota soil by constructing reservoirs and dams, which will eventually, through human engineering, do something nature never intended, namely, link a southern flowing drainage basin and a northern flowing drainage basin. In effect, the Garrison project will do away with the great continental divide in North Dakota. No longer will all rivers to the north of the divide flow into Hudson's Bay and all rivers south of the divide flow into the Gulf of Mexico via the great Mississippi River. Instead, the two river systems will be linked and the waters of the systems will be mixed.

● (1600)

About ten years ago people in Manitoba who had looked at plans for Garrison started to wonder about the effects it might have on Canadian waters. The two river systems flowing north and south have very different characteristics. There are fish species in the southern drainage system which are completely foreign to Canada, and vice versa. What other kinds of aquatic life such as tiny bacteria or foreign chemicals might also be transferred into Canada by that mixing of the waters, people ask. As Manitobans started to ask more questions about the effects of Garrison, they started to get more worried about what they might be in for if the project went ahead. Manitoba politicians were soon on the phone and using the mails to contact their counterparts in Ottawa about making representations to the U.S. Government about Garrison. Talking to the State of North Dakota was one possible way for Manitobans to get their increasing concerns across, but it soon became obvious to those making the representations that Garrison was as much a U.S. federal concern as it was a state matter. So the Canadian federal Government got dragged in to help Manitoba through the intricacies of international diplomacy and negotiation.

Through the efforts of the Canadian Government, agreement was reached in 1975 that the International Joint Commission would do a comprehensive study of the trans-boundary transfers expected to occur as a result of Garrison, a study I already referred to, Mr. Speaker. The IJC was also given a mandate to assess the impact of these environmental transfers on the ecosystem of Manitoba. It was 1977 before the IJC completed its report and made it public. Most people who live in Manitoba did not need to know the minute details of the report to grasp one basic conclusion that the IJC put forward, namely, that Garrison, if it were constructed and completed as designed in 1975, would have a serious impact on the waters of Manitoba. Not only that, but the study said it was likely that various kinds of fish alien to Manitoba would eventually find their way into the Province's lakes and rivers. With them would come the threat of competition for limited food sources and the possible waning of indigenous fish populations to be replaced by the hardier variety of southern fish.

Since the IJC report, Mr. Speaker, and on the strength of that report, Manitobans have been waging war against Garrison. The current Government has established a Garrison focus office to answer citizens' inquiries and to keep on top of the issue. I know the Hon. Member for Selkirk-Interlake and other Members of the House from other Parties have travelled to Washington, along with Manitoba Cabinet Ministers, to lobby American legislators. Indeed, I had an opportunity to do this myself in September of 1981 when I was in Washington with a Canadian parliamentary delegation. I met with American politicians from North Dakota and Minnesota, and tried to get a meeting with Senator Mark Andrews, but he displayed the same kind of closed-mindedness that the Hon. Member for Winnipeg-Assiniboine referred to. In fact, he was not even prepared to meet with me. I phoned one hour before the meeting and confirmed that he would indeed be meeting with me, and when I got there he had suddenly been called away. I had hoped to look him straight in the eye and just tell him what this project meant to Manitoba and what the Americans were doing to their relationship with us by being willing to go ahead with this come-what-may, despite the effects on Canada. But there was no opportunity to do that because, let us put it bluntly, he avoided me as I am sure he has avoided others on this issue.

My colleagues and I in the NDP, Mr. Speaker, are kept up to date on matters relating to Garrison by the Hon. Member for Selkirk-Interlake, who has concerned himself with Garrison. I have been informed by him recently of allegations which emanate from the U.S. and involve bogus scientific information as distributed by the Department of the Interior. The information has to do with Garrison, and I would therefore like to move an amendment No. 28 that:

> The Canadian Government do everything in its power to investigate charges that falsified information has been used in preparing U.S. environmental assessments relating to wetlands and wildlife habitats in North Dakota and that, further, the Government do everything in its power to ensure that no falsified information has been used which might result in adverse environmental effects to Manitoba's waterways.

The Acting Speaker (Mr. Corbin): The Chair would ask the Hon. Member if his amendment is in addition to the present text of the motion or does—

Mr. Blaikie: It is an addition and it will become item No. 4, Mr. Speaker.

The Acting Speaker (Mr. Corbin): The Chair finds the amendment to be in order.

Mr. Taylor: Mr. Speaker, could we have copies of that amendment? Secondly, I assume it will be possible to discuss both the amendment and the motion at the same time.

The Acting Speaker (Mr. Corbin): Yes. Debate is now open on the full text of the motion as amended. Strictly speaking, the debate would be on the amendment but the amendment includes the full text of the motion, so if you debate one, you debate them all. Also, the Hon. Member will get copies of the amendment.

[*Translation*]

Mrs. Suzanne Beauchamp-Niquet (Parliamentary Secretary to Deputy Prime Minister and Secretary of State for External Affairs): Mr. Speaker, regarding the motion presented by the Member for Selkirk-Interlake (Mr. Sargeant):

> That, ... the Government should considere the advisability of taking those measures necessary to ensure that there is no damage caused to the Manitoba environment by the completion of the Garrison Diversion Unit in the State of North Dakota and, that such measures to be considered could include—

And at this point, three suggestions are made. Mr. Speaker, I am pleased with this opportunity to rise in the House today and address a matter of serious concern to the Government.

The Hon. Member for Selkirk-Interlake is suggesting that the Government consider taking the measures necessary to ensure that no damage is caused to the Manitoba environment by the completion of the Garrison Diversion Unit in the State of North Dakota. The Government is very much aware of the risk of damage to the Manitoban ecosystem as a result of the present plans for the Garrison Diversion project, and consequently, it has taken steps to ensure that the United States does not renege on the assurances it has already given us that it will not undertake any work in connection with the Garrison project that might have a damaging effect on waters flowing into Canada. As the Hon. Member is aware, these assurances are based on the Boundary Waters Treaty concluded in 1909 between the United States and Canada, which provides, and I quote:

● (1610)

—waters flowing across the boundary shall not be polluted on either side to the injury of health or property on the other.

The assurances given Canada by the U.S. Government in connection with the Garrison Diversion project are also based on the recommendations of the 1977 report by the International Joint Commission. The Commission's main recommendation was that construction of those parts of the Garrison Diversion project that might affect waters flowing into Canada should be put on hold for the time being.

The Government has taken advantage of every opportunity to ensure that the concerns of Canadians and more specifically of Manitobans are fully understood and considered by the U.S. Congress and Administration, with respect to the design and construction of works under the Garrison Diversion project.

Recent developments, including an increase by Congress in appropriations for the so-called Phase I and the contract awarded for construction of the Lonetree dam and reservoir, have been followed very closely by the Governments of Canada and Manitoba, with a view to being ready to intervene at senior political levels in order to protect Canadian interests.

Very recently, after the Lonetree contract was awarded, the Government expressed its concern about the impact of the timing of the contract award on the current consultation process. We still consider consultation with the United States as the most effective way to respond to Canadian concern about aspects of the Garrison project that might have a disastrous effect on waters flowing into Canada.

Mr. Speaker, on October 3 of this year, the Canadian Government, in a memorandum to the Department of State, specifically deplored the fact that the contract for construction of the Lonetree dam, the main work of the Garrison project's water distribution network, was awarded on August 24, 1983, before consultations scheduled by the International Joint Commission were finalized and agreement was reached by both Governments. This Government was particularly critical of the U.S. step because it was taken after a meeting of representatives of both Governments in Ottawea on July 20 of this year to discuss technical aspects of Canadian concerns about some of the project works, on the basis of plans and technical specifications that had been submitted to the Canadian side. At the meeting, a substantial amount of useful information was exchanged and resulted in a fruitful discussion that seemed to prepare the ground for a high level consultative meeting equally productive that both Governments intended to have in September. In the memorandum it sent to the Departmnt of State, this Government mentioned that realistically, the September consultations could not have given positive results if they had more or less coincided with the Administration's announcement that a contract had been awarded for construction on the main work of the Garrison project, the very part of the project that was still the subject of intent consultations.

The Government of Canada reminded the Department of State that in principle, it saw no reason to object to projects aimed at promoting the economic development of certain regions of the United States, as the Garrison Diversion project was, and that it could understand and fully appreciate the American Administration's standing commitment to the people of North Dakota to replace farmland used to build flood control works. Nevertheless, the Government also felt it should point out that certain parts of the plan as authorized by Congress were likely to have a disastrous effect on waters flowing into Canada, as had been the conclusion of the International Joint Commission in its 1977 report to both Governments.

Mr. Speaker, as long as the plan authorized by Congress is maintained, the Government of Canada can only assume it is still possible that the Garrison project will be funded by Congress up to completion, and this includes what is designated as Phase II. This situation will go on fueling the serious concerns which Canadians have with certain aspects of Phase I and the whole of Phase II. On the other hand, the Canadian Government did inform the United States that it appreciated the general assurances given on various occasions by the Administration, as well as the qualification tied to the last estimates approved to this date by Congress for the 1984 fiscal year that no monies earmarked under the current commitments of Congress shall be used for the completion of sections of the Garrison diversion project in North Dakota that could pollute, introduce foreign biota into or unduly increase or decrease the volume of water flowing into Canada. However, the Government fully recognizes that, in order to efficiently protect Canadian interests and prevent pollution of Manitoba waters by foreign biota originating from a diversion of waters from the Missouri River basin, it must make sure that the general guarantees given by the United States at the ministerial level will translate into technical assurances and guarantees included in the specifications for the Garrison project.

For this reason, the Government is currently attempting to co-operate with officials from the American State Department and Department of the Interior in order to monitor, clarify and resolve specific issues of a technical nature raised by the Canadian representatives after a scrutiny of the Garrison project specifications. In the course of that scrutiny, the Canadian officials' major concern has been to evaluate to what extent the specifications involved the hazard of transferring biota, larvae and fish from the Missouri River basin into the Hudson Bay basin. Other questions have been identified in connection with wildlife management plans, especially as far as migrating birds are concerned.

As I have already said, an important bilateral meeting of experts was held in Ottawa on July 20, 1983, which was attended by representatives of the Water Board and the Department of Fisheries and Wildlife of the state of North Dakota, the "Garrison Conservancy District", the Bureau of Reclamation in Bismark, Denver, Billings and Washington, and of the State Department on the American side, and on the Canadian side by representatives of the Department of Natural Resources of Manitoba, Environment Canada, the Department of Fisheries and Oceans, and also the Secretary of State for External Affairs. The purpose of that meeting was to give the Administration an opportunity to provide technical data concerning the Garrison project and to allow Canadian representatives to raise other matters and concerns. A first list of technical problems drawn up by the Canadian representatives and submitted to the State Department by the Canadian Embassy in Washington before the meeting made it possible to delineate the issues involved and the discussions that followed.

Mr. Speaker, despite a very useful exchange of information, Canada has not yet received any answer to some of its major concerns about the impact of the project on the flow of water into the Hudson Bay's basin and Canada. Such was the conclusion reached by the officials who attended the federal-provincial meeting held early in September, when the Deputy Minister and officers from the Manitoba Department of Natural Resources met in Ottawa with representatives of Environment Canada, Fisheries and Oceans and External Affairs.

● (1620)

Consequently, the Canadian government has decided to officially submit to the State Department a final list of technical issues of concern for Canada in connection with the Garrison project. Through that list which accompanied the note delivered by the Canadian government during the first week of October, Canada is asking that technical alterations be made to the works provided under phase I. By doing so, Canada is complying with the recommendations made in the 1977 report of the International Joint Commission which provides for consultations between Canada and the United States until an agreement is reached so that any piece of work the construction of which has been approved will not affect streams flowing into Canada.

Mr. Speaker I would like to tell the House about the technical problems which Canada tries to solve through such consultations. I would like to mention more especially the McClusky fish screen, the drainage of municipal and industrial wastes at the Lonetree dam and reservoir and the plan to minimise the impact on wildlife.

Canada is concerned because the Bureau of Reclamation has mentioned in the final schedule to the statement on impacts filed with the Environmental Protection Agency in July 1983 that the construction of the McClusky fish screen is no longer considered. The construction of such a screen was provided in the 1979 statement on the environmental impact, but the final statement mentions that the areas now to be developed does not affect any Canadian interests and suggests instead that the water running through the Garrison project be filtered at several locations downstream the Lonetrea reservoir.

When a fish screen is built on the channel, the fish, their eggs the larvae and all other biota in the Missouri River would flow directly into the Lonetree reservoir situated in the

Hudson Bay drainage basin a few metres away from the Cheyenne River. As the Hon. Members know, the Cheyenne river flows into the Red River which is part of the Hudson Bay drainage basin. The fish and other biota in the Missouri River would not only be found in Lonetree Reservoir but also in the entire system: head races, inner reservoirs, irrigation areas, and retaining channels, thus greatly increasing the danger of biota transfers from the Missouri River drainage basin to the Hudson Bay basin.

The International Joint Commission had based its assessment that the construction of the Lonetree Reservoir was acceptable not only on the establishment of a closed system, but also on the installation of a fish screen in the McClusky Canal. Canada strongly supported the recommendation of the International Joint Commission to the effect that fishing on the Lonetree Reservoir be prohibited. On the other hand, Canada does not believe that this position could be strictly enforced. It has therefore concluded that the fish screen in the McClusky Canal had to be set up during Phase I to act as a first barrier against fish and fish eggs and lessen the dangers of transfers between the basins. Canada has noted similar findings by the Environment Protection Agency in its detailed environmental impact study.

Mr. Speaker, while supporting the setting up of a fish screen, and in spite of recent improvements in the design and use of fish screens, Canada must agree with the International Joint Commission that the McClusky fish screen, just like any other mechanical device, could not entirely and for all times prevent transfer of foreign biota between the drainage basins. On the other hand, Canada would oppose any plan to stock the Lonetree Reservoir with fish to check the effectiveness of the fish screen, in order to minimize the dangers of biota transfer between the basins resulting from fishing activities.

Canada is concerned also with the possible use for municipal and industrial purposes of unfiltered water and the dangers of possible biota transfers from the Missouri River hydrographic basin into the Hudson Bay drainage basin. Canadian experts have indicated that the bolted obturator, which is being planned to close the down-stream end of the municipal and industrial overfall, could easily be opened. In times of drought, the temptation would certainly increase to open the overfall; so Canada has asked that the plans be modified to provide for a more permanent obturator such as a reinforced concrete sluice-gate.

Third, Canada has advised the United States that it would like to open consultations on the 1982 plan for lessening the impact on wildlife, as described in the final supplement to the environment impact study by the Bureau of Reclamation. Although this plan is supposedly based on the creation, preservation and restoration of wetlands and wildlife habitats, as well as related pastures and woodlands, it does not provide for the replacement "acre by acre" of the marshlands which the officials of the Canadian Wildlife Service who reviewed and evaluated the alleviation plan have pointed out that the modelization process of the habitat assessment procedure has not yet been tested in the field to determine the validity of the data used in this plan. Canada still believes that the United States must continue to fully respect the spirit of the migratory birds treaty they signed with Canada in 1916.

In addition to the three major concerns which I have just described, the Canadian Government has called the attention of the United States to other technical problems which we would like to have solved in the near future through the consultation process. These issues deal with the question of how to design and build the Lonetree Reservoir to prevent fish eggs, larvae and viruses to filter through the banks and the bottom of the reservoir and join the rivers flowing into Hudson Bay, the possibility that irrigating the lands along the McClusky Canal will result in the transfer of biotas between basins, the need to preserve the present sluice gates of the New Pockford Canal until the Lonetree Reservoir becomes completely operational, the design of the segments of the New Pockford Canal which cross tributaries of the Sheyenne River, the additional information required about the Warwick-McVille irrigation zone, and the fact that the Oakes Canal and the Taayer Reservoir are located very near the watershed of the Wild Rice River, which flows into the Red River.

Mr. Speaker, I would like to conclude by saying that the Government is determined to ensure that in any work of what is commonly called Phase I of the Garrison Project all possible precautions will be taken to eliminate the possible transfer of human organisms from one basin to the other and its effects on Manitoba lakes and rivers. We hope that the problems—

The Acting Speaker (Mr. Corbin): The Hon. Member for Témiscamingue (Mr. Tousignant) on a point of order

[English]

Mr. Tousignant: Mr. Speaker, I would like to bring to the attention of the House that the Hon. Member for Winnipeg-Birds Hill (Mr. Blaikie) at the beginning of his remarks made some allegations that the Government does not care. He is not even here to listen to the answer.

[Translation]

The Acting Speaker (Mr. Corbin): Order please! That is not a point of order.

[English]

Mr. Lee Clark (Brandon-Souris): Mr. Speaker, I would like to share some thoughts with Members of the House this afternoon and in doing so express the concern of many Manitobans about the Garrison Diversion a project which has been in the works for many years. We are particularly concerned in the Province of Manitoba about the recently announced first phase.

● (1630)

As all Hon. Members of the House know, the Government of the United States recently announced plans to proceed with the $5.82 million Lonetree Reservoir. Unfortunately, that decision was made without sufficient safety precautions having been taken. We in the Province of Manitoba are concerned about this development for a variety of reasons. First, we have been and continue to be concerned about the problem of the quality of water which comes into the Province of Manitoba, particularly in my constituency of Brandon-Souris, from the State of North Dakota within the Souris River system.

The Acting Speaker (Mr. Corbin): Order, please. I apologize to the Hon. Member for Brandon-Souris (Mr. Clark), but according to the Standing Orders only one Member may be on his or her feet at the same time. I plead with Hon. Members to lower the tone of their conversations.

Mr. Clark (Brandon-Souris): Mr. Speaker, your intervention indicates that you understand this is a very serious problem in the Province of Manitoba. We appreciate your concern. As I was saying, we have been concerned for a long time about the quality of the water. Also we are very concerned that sufficient safety measures were not taken into consideration, and about the possibility of seepage and fishermen using the water system in North Dakota and quite innocently transferring foreign species into the Canadian water system. As well we are concerned about the fact that when the first phase was announced, it seemed to come as a surprise to the Government of Canada. As was suggested recently in the Winnipeg *Free Press*, the Canadian Government might not have been surprised if it had taken every available opportunity to have observers on site.

Mr. McKenzie: The New Democratic Party was invited to send scientists and it declined to do so.

Mr. Clark (Brandon-Souris): I hear my hon. colleague. He is quite correct. Prior to entering the Chamber this afternoon, I heard the debate which was taking place. Differences of opinion were being expressed as to the roles of various Manitoba Governments in this case. It is important for all Hon. Members to understand that the concern about the Garrison is something which transcends Party differences. We may disagree on how best to implement the concerns, but it is very important to realize that this is a non-partisan matter about which all the people of Manitoba are very concerned. Therefore, we urge action by all concerned Governments. We believe that this is the time for energetic leadership by both Governments. They should take every available opportunity to ensure that they are as fully conversant with developments as they can possibly be.

Our concern is even greater as a result of recent revelations in the American press. It appears that falsified information was used by some Americans with respect to the environmental impact of the proposed development. Therefore I am very much in sympathy with the amendment introduced by the Hon. Member for Winnipeg-Birds Hill (Mr. Blaikie). It is important that the House register its concern and do everything it possibly can to ensure that such falsified information has not been made available to Canada so that the sense of security of some Canadians is not based upon false premises country which is most responsible for arousing environmental awareness in the United States, especially in the areas of air pollution due to acid rains, or Great Lakes pollution, or the protection of territorial waters, whether Canadian or otherwise. Indeed, if there is a government and politicians who are aware of the importance of sport fishing, or drinking water, it is the Government of Canada which is constantly involved in discussions with the provinces through its Environment and Forestry departments, and which . . . through this House has on two occasions taken upon itself to provide the Sub-committee on acid rains with orders of reference urging its members to take the necessary steps to meet throughout Canada with people on an international level and devise a valid and workable strategy to fight against this curse of the 20th century.

The Acting Speaker (Mr. Corbin): Order. It is my duty, pursuant to Standing Order 24(2) to interrupt the proceedings.

Shall all orders listed under Private Members' Notices of Motions preceding order No. 102 be allowed to stand by unanimous consent?

Some Hon. Members: Agreed.

Statement of Richard Steinbach, New Rockford, N. Dak.

I, Richard Steinbach, New Rockford, North Dakota, represent the Committee to Save North Dakota and the New Rockford Canal Protestors Group.

The Carrington Irrigation Station found some years ago that it does not pay to irrigate small grains, and sunflowers respond to only limited irrigation.

Presently, with only a very small percentage of irrigated acres, a front page article from the Federal Statistical Reporting Service (11-23-83) has these quotes:

"No where else on earth where farmers do as well as in North Dakota."

"North Dakota is counted as one of the major states in maintaining the 'balance of trade' with foreign nations."

"North Dakota ranks first in the nation in the production of durum and second in the production of all wheat and is first in the production of sunflowers."

"North Dakota is first in the production of barley and flax, third in oats and fourth in sugar beets."

"In overall crop production, North Dakota ranks fourth in the nation."

"North Dakota farmers also have one of the highest net farm incomes in the nation."

Yet even with this excellent dryland agriculture we are told by various politicians, bureaucrats, ex-teachers, coaches, etc. that it is now vitally important that the nation's taxpayers spend over $1.2 billion and over $3700 per irrigated project acre to put the project in place. It's no wonder some potential irrigators are so anxious for the project, they will only have to repay 15 percent of the $3700 per acre cost.

In addition to this huge subsidy, the Conservancy District, in its great wisdom, has seen fit to grant irrigators yet another subsidy!

The project water will be free but there will be an operation and maintenance charge. This charge keeps escalating upwards. The latest figure we have seen is about $50 per irrigable acre.

The first year a farmer uses project water, the Conservancy District will pay 90 percent of the O&M charge, which will be scaled down to 10 percent the ninth year and thereafter the farmer will pay the whole charge.

Mr. McKinney. I want to take this opportunity as a Canadian citizen to thank the Congress of the United States for the opportunity to come here and testify in your Congress. I want to introduce the gentleman next to me, Mr. Dick Steinbach from North Dakota, and he is our American cochairman from that great State in the Union.

Later on, I would like to recognize some of our delegation, if I may, at the end of my submission.

I am Jerry McKinney of the city of Winnipeg, Manitoba, Canada, and, as has been recognized here, cochairman of the United Canadian-American Anti-Garrison Lobby. We are an organization representing hundreds of thousands of Canadians and Americans in 180 organizations in Manitoba and North Dakota who strongly oppose the completion of the Garrison diversion project in North Dakota as now authorized by Congress.

Construction of the Garrison diversion project as authorized would have a devasting implact upon the human and natural resources of the Province of Manitoba. The International Joint Commission in its 1977 report on the project stated:

> The Commission further concludes that while most of the impacts can be mitigated, those from possible biota transfer are so threatening that the only acceptable policy at present is to delay construction of those features of the Garrison diversion unit which might result in such transfers.

More recently, the environmental impact statement on features of the project in May 1983 stated:

> We strongly believe the Bureau of Reclamation must evaluate another option before proceeding with any construction plans. That option entails eliminating all project areas under plan I which naturally drain to the Souris and Red River basins (Hudson Bay drainage) and adding Garrison extension in South Dakota.

Our prime request is that continued construction of the project as authorized be ceased and a commitment made to search for alternatives that can benefit North Dakota without presenting unacceptable risks to human welfare and the natural resources of the Hudson Bay drainage basin, an area in excess of 400,000 square miles covering most of the fertile farming and fishing areas of western Canada.

With that, I conclude the actual submission, Mr. Chairman.

Senator Mattingly. Thank you very much.

Would your associate like to make a comment?

Mr. Steinbach. We believe the Garrison diversion project is far too costly and adversely impacts too many people. The cost-benefit ratio is too low. Just a few short comments from the Federal Statistical Reporting Service. This was quoted by County agents speaking to Kiwanis in Rockford:

> Nowhere else on Earth where farmers do as well in North Dakota. North Dakota is counted as one of the major States in maintaining the balance of trade with foreign nations. North Dakota ranks first in the world in durum wheat, second in flax, third in oats, and fourth in sugar beets. In overall crop production, North Dakota ranks fourth in the Nation. North Dakota farmers also have one of the highest net incomes in the Nation.

In view of that, we don't believe we need an irrigation project which will only benefit 1,500 of a total of 37,500 farmers in the State.

Thank you, Mr. Chairman.

Senator MATTINGLY. Thank you, Mr. McKinney.

Mr. MCKINNEY. Thank you, Mr. Chairman.

Mr. Doer, Manitoba Federation of Labor—stand up, please—and we have Mr. Ernie Blais from the federation representing 120,000 people of the Province of Manitoba. We also have here Carol Mosse representing our National Farmers Union in the Province of Manitoba. We also have here Daniel McNeil and Ruth Pryzner, representing the University Students of Manitoba, Brandon, Manitoba.

I believe there are other supporting groups—Keith Smith—I guess they can all stand up if they are not already doing so. They are here to study the workings of the government in your great democracy and we are proud of our great democracy, too. Let us not have this project become, shall we say, a barrier between our continued friendship between our two Nations.

Thank you, Mr. Chairman.

Senator MATTINGLY. Thank you, and Mr. McKinney, I would tell all your people you brought with you, today, if you want to see democracy work even more, you are welcome to come to the U.S. Senate this afternoon. I believe we go in session at 12 o'clock and at about 1 or 2 o'clock, it ought to be heating upon the Senate floor. I hope you can find time to come by and enjoy that. It is a wonderful place to visit and it is one of the few countries in the world, as you come here today, to express your opinion and, hopefully, have some impact.

Mr. MCKINNEY. Thank you very much, Mr. Chairman.

SUBCOMMITTEE RECESS

Senator MATTINGLY. The subcommittee will recess until 2 o'clock this afternoon when we will continue hearings with with Members of the Congress and outside witnesses.

[Whereupon, at 11:53 a.m., the subcommittee was recessed to reconvene at 2 p.m. the same day.]

(AFTERNOON SESSION, 2:08 P.M., MONDAY, APRIL 2, 1984)

NONDEPARTMENTAL WITNESSES

SUBCOMMITTEE PROCEDURES

Senator COCHRAN [presiding]. The subcommittee will please come to order.

In the absence of the chairman of the subcommittee, Senator Hatfield, I have been asked as a member of the subcommittee to preside over today's session. On behalf of the subcommittee, I want to welcome each of you to the hearing today. We have a large number of witnesses who wish to be heard. And in accordance to our notification of each of the witnesses, we ask everyone to restrain their oral testimony so we will all have a chance to hear the witnesses who are here. I hope that you know that you detailed statements will be included in the record in full and they will be carefully reviewed.

If I may at this time, with the indulgence of Senator Stennis, I would like to recognize the distinguished Senator from North Dakota to present our first panel of witnesses and make any opening statements that he may have at this time.

GARRISON DIVERSION UNIT, NORTH DAKOTA

STATEMENT OF HON. MARK ANDREWS, U.S. SENATOR FROM NORTH DAKOTA

Senator ANDREWS. I would be glad to, Mr. Chairman.

Let me say it is a privilege to have our Governor here today in support of the Garrison diversion project, a project that was authorized almost 20 years ago, a project that retains one of the most favorable cost-benefit ratios of any Western reclamation project, a project that has been supported on a bipartisan basis by every Governor and Member of Congress from North Dakota over the last 30 or more years.

The project, of course, is vitally important to our State if we are to take care of the severe environmental stress we have with our rivers recurrently drying up during summer drought periods.

Mr. Chairman, I might point out that North Dakota's cities have no other source of waters. There are no aquifers under our State. They depend on this surface water for their water supplies. Of course, the dream of our State even before it became a State back in the 1880's, when we memorialized Congress as a territory, was to move Missouri River water, that clear sparkling crystal pure water from the Rocky Mountains that comes through Montana and then flows into North Dakota, to move that water into the three eastern river systems to make sure there would be an adequate supply of water.

Mr. Chairman, the pioneers of North Dakota, the decade before statehood, suffered through a drought and they recognized this need. The State again had to point it out again so clearly during the drought years of the 1930's. The project was authorized as a payment to North Dakota for the lands we gave up in the western part of the State to take care of the flood protection needs and the power generation for downstream States. We have appreciated the support of this committee in the past and we certainly hope we will have the support of the committee in the future.

COMMUNICATION FROM SENATOR BURDICK OF NORTH DAKOTA

Mr. Chairman, my senior colleague, Senator Burdick, who serves on this subcommittee, as you know, is out of town on official Senate business and I would like to have his letter to the chairman in support of the project made a part of the record immediately following my remarks and before the statement of the Governor of North Dakota.

[The letter follows:]

LETTER FROM SENATOR BURDICK

MARCH 30, 1984.

Hon. MARK O. HATFIELD,
Chairman, Subcommittee on Energy and Water Development, Committee on Appropriations, U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: At 2 p.m. on Monday, April 2, 1984, the Energy and Water Development Subcommittee is scheduled to receive testimony from the Governor of North Dakota and representatives of the Garrison Diversion Conservancy District.

As you know, I have consistently supported the Garrison diversion project throughout my 26 years in the Congress, and I am very encouraged by the budget request of $53.5 million for the project in the fiscal year 1985 budget. Unfortunately, I will be unable to attend the April 2 hearing since I will be out of the country on Senate business. I would be deeply appreciative if you would greet my North Dakota colleagues on my behalf and commend them on their fine work on the Garrison project.

Upon my return, I will submit an official statement to be included in the record of the hearing.

With kind regards, I am
Sincerely,

QUENTIN N. BURDICK.

STATEMENT OF HON. ALLEN I. OLSON, GOVERNOR OF NORTH DAKOTA

ACCOMPANIED BY:

CHARLES RICHTER, CHAIRMAN, BOARD OF DIRECTORS, GARRISON DIVERSION CONSERVANCY DISTRICT

BOB NUFELD, DIRECTOR, WATER DEVELOPMENT AGENCY, SOUTH DAKOTA

GEORGE LETVIN, PRESIDENT, NORTH DAKOTA WATER USERS ASSOCIATION

Senator ANDREWS. It is a great personal privilege for me to introduce, in a sense, to the committee, my good friends on this committee, the Governor of North Dakota, a most intelligent and very respected individual from our State, a native of North Dakota, the Honorable Allen Olson.

Senator COCHRAN. Thank you very much, Senator Andrews. We appreciate your being here to present the Governor to the committee. We thank you also for the good advice and counsel that you provide in connection with this and many other projects that are of importance to the State of North Dakota.

Senator Stennis, would you have an opening statement you would like to make?

Senator STENNIS. No, except to say I am delighted to be here. I am glad I got here in time to hear the testimony from the Governor. Of course, I am partially from Alabama anyway.

I went to the celebration and groundbreaking of this project many years ago and have a mighty good impression and still have. Now, I am glad to meet you and your group today.

Thank you very much.

Senator COCHRAN. Thank you, Senator.

Governor Olson, we welcome you to the committee, you and your colleagues and we ask you to proceed in any manner you wish.

INTRODUCTION OF SUPPORTING WITNESSES

Governor OLSON. Senator Cochran, thank you very much. We do appreciate the opportunity to testify. We are going to accede to your request and be as brief as we can.

There are several important issues we would like to emphasize. I have with me George Letvin on my left who represents the private sector in a sense, North Dakota Water Users. On my immediate right, Charles Richter, chairman of the Garrison Diversion Conservancy District. I will ask them to give you brief comments after I am done with my brief testimony.

On my far right is Bob Nufeld, who is director of the Water Development Agency in our neighboring State of South Dakota. Last year, Governor Janklow was here to personally tell the Members of Congress in both Houses of the importance of this project in South Dakota and the cooperation and anticipation it has. I ask Bob Nufeld to make a couple of comments to you prior to my testimony, if that is acceptable.

Senator COCHRAN. Fine, Governor. You may proceed.

Mr. NUFELD. Mr. Chairman, members of the committee, I think it is very gracious of the North Dakota people, and especially Governor Olson, to render some of his time. I represent Governor Janklow. We have had concerns in the past with respect to the Garrison project in South Dakota. I am here to tell you we attempted to work those out with North Dakota.

Every time we have come to a specific issue that needed to be resolved we have been able to do that. We found a way and have an idea that can provide benefits to Garrison in South Dakota even above and beyond those originally envisioned. There are people here in the audience from South Dakota, members of my State boards, members of the Oahe Conservancy Subdistrict, and even farmers who wish to irrigate with this water. We think it is important enough for them to be here. I would like to have them stand and be recognized so you know there is support in South Dakota for this appropriation.

Will the group from South Dakota, please stand. Thank you very much.

Senator COCHRAN. Thank you.

Mr. NUFELD. I want to let you know we support this appropriation for the Garrison unit.

Senator COCHRAN. Governor.

Governor OLSON. I will proceed, Mr. Chairman, and briefly as possible, but still address the important issues.

FUNDING REQUEST

We have, of course, supported this as Senator Andrews indicated, from the beginning of statehood and we continue today in a bipartisan political sense North Dakota's strong support. We are here to support the specific appropriation request which is in the neighborhood of $55 million. Included in that present request for funding is $8 million for research in what is called the Oakes test area relating to the technical investigations important to the joint Canadian-United States Technical Review Team established to assist the consultation process and implementation of the recommendations of the International Joint Commission.

CANADIAN OPPOSITION

I know that the Canadian dimension of this issue has been rather vexing to the Congress and to the executive branch of the Federal Government. We believe, and I argued the case before the State of North Dakota in front of the International Joint Commission as attorney general, and I can say to you without any equivocation whatsoever that the terms, the recommendations of the IJC report, are being complied with. Each time we have testified in the Congress on this matter we have recommended and the Congress has always tempered and limited its appropriations to those aspects of the project that do not affect our natives and friends in Canada.

Also included in the proposed budget is $3.2 million to continue wildlife habitat and mitigation activities, another dimension of the project which have raised issues difficult to address. Over $2 million of wildlife habitat lands was purchased from willing sellers during 1983 and represents a successful and cooperative mitigation effort by landowners, project sponsors, and wildlife agencies. Much progress has been made to address the concerns of the Canadian Government through the implementation of the IJC recommendations, as I indicated.

The State fully supports the continuation of the formal consulation process begun in 1981 and the long-called-for technical and scientific monitor of international issues begun this year by the joint team of experts from the Province of Manitoba, the State of North Dakota, and the two Federal Governments. Through the identification of fact and the application of technical and scientific knowledge, those important issues are being appropriately addressed in an atmosphere of mutual respect and desire to proceed with a project which meets the water needs of my State and region while guaranteeing the treaty obligations of the United States and Canada.

PICK-SLOAN MISSOURI BASIN PLAN

The construction of the six main system dams on the Missouri River under the Pick-Sloan project resulted in the permanent sacrifice of 1.5 million acres in the three upper basin reservoir States of South Dakota, North Dakota, and Montana. The cost of these dams has been repaid through the sale of hydroelectric power in the 10 States of the Missouri basin region. In 1983, the Pick-Sloan prevented nearly $800 million in flood damages.

While flood control and navigation features of the project have been in place for many years, the reclamation features of the project in the upper basin have yet to become operational. Yet the Garrison diversion unit continues to have one of the best cost-benefit ratios among water projects, as Senator Andrews indicated. North Dakota is one of the Nation's most agricultural States and, again, as Senator Andrews indicated, we need a healthy, stable, and diversified agriculture. The risks associated with agriculture are enormous, and I won't reiterate what Senator Andrews so artculately placed before the committee.

AGRICULTURAL BENEFITS

Several counties in south-central and southeastern North Dakota have experienced drought conditions for 6 of the past 8 years. This includes a section of the diversion unit scheduled for first delivery of water in 1987. I believe you will understand how much they are looking forward to the possibility of having a stable water source in that area that has been hit so hard by drought conditions. The need for a water distribution system is as real in my State today as when this project was authorized some 20 years ago. The diversity of cropping that is offered by the project is important to the income stability and profitability of agriculture and the small businesses that serve agriculture. It will free many farmers from the shackles of a one-crop economy.

And we consider it out there obviously as a public investment and future of the family farm. Agricultural policy in this country must be aimed at improved profitability for family farmers if we are to maintain a system which provides an abundance of food to ourselves as well as the rest of the world, and it is the only area where we are still world class and irrigation projects will help this country maintain that special status that we have in the world.

The Garrison diversion project represents North Dakota's long-standing commitment to comprehensive water management in the Missouri River basin and my State's determination to provide its people with a sustained and quality supply of water.

We thank you for the opportunity to appear before you. Again, after we are done with this brief testimony, sir, we will be responsive to your questions. I would ask Mr. Letvin to make a few comments on behalf of the private sector in the State, and then Mr. Richter.

Mr. Letvin. Mr. Chairman, Senator Andrews, I speak for the North Dakota Water Users Association which represents the people of North Dakota, private citizens, businessmen, farmers, ranchers, local chambers of commerce, industry, and the grass roots of North Dakota, plus the State organizations and associations. The Garrision diversion project, more than any other project, activity, or industry, represents North Dakota's future. We feel that we know what we need in North Dakota, and I think the message has been very clear from the people of North Dakota that they support this project. We appreciate that the Garrison diversion is a critical issue for North Dakota and your support of Garrison is appreciated and your continued support is respectfully requested.

Thank you.

Senator COCHRAN. Thank you, Mr. Letvin.

[The statement follows:]

STATEMENT OF GEORGE LETVIN, PRESIDENT, NORTH DAKOTA WATER USERS ASSOCIATION

Mr. Chairman and members of the subcommittee, I am George Letvin, a businessman from North Dakota, and president of the North Dakota Water Users Association. The North Dakota Water Users Association represents the people of North Dakota, private citizens, businessmen, farmers, ranchers, local chambers of commerce, industry, and the grassroots of North Dakota. I am here on behalf of the water users to request your favorable recommendation to the full Committee on Appropriations that these funds be appropriated.

The Garrison diversion project, more than any other project, activity, or industry, represents North Dakota's future. Without water, we have nothing. Our economy, businesses, quality of life, recreation, and every other facet of our lives depends on water.

Without Garrison diversion there would have been no Pick-Sloan plan. Energy development in the Missouri River basin would be very limited. The fantastic fishing and recreation industry along the Missouri River would not exist. Navigation enhancement and flood protection in downstream States would not be available. Municipal, irrigation, and industrial development and growth in central and eastern North Dakota cannot occur without the water supply that will be provided by Garrison diversion. Water-based wildlife and recreation can and will be stabilized and enhanced through Garrison diversion. With Garrison diversion, the potential and the opportunities in North Dakota are unlimited.

We are asking you to support a project that is not only good for North Dakota, but is good for the entire Nation. It is a wise investment in our economy that not only will be almost entirely repaid, but will provide untold benefits to North Dakota, to the Missouri River region, and our entire Nation. North Dakota has sacrificed annually about $100 million for the Pick-Sloan plan. The Pick-Sloan plan has already provided billions of dollars of benefits, mostly to downstream States. Garrison diversion is critical for North Dakota. Your past support of Garrison is appreciated and your continued support is respectfully requested. Thank you.

NORTH DAKOTA STATE ORGANIZATIONS SUPPORTING THE GARRISON DIVERSION PROJECT

Senate of State of North Dakota, House of Representatives of North Dakota, North Dakota Water Users Association, North Dakota Irrigation Association, North Dakota Irrigation District Directors Association, North Dakota Farm Bureau, North Dakota Farmers Union, North Dakota Water Resources Districts Association, North Dakota AFL–CIO, North Dakota Bankers Association, North Dakota Building and Construction Trades Council, Associated General Contractors of North Dakota, North Dakota Association of Counties, Greater North Dakota Association, North Dakota Association of Rural Electric Cooperatives, North Dakota Association of Soil Conservation Districts, North Dakota Stockmen's Association, Coalition of Garrison Supporters, and North Dakota Rural Water Systems Association.

National and regional organizations: Water Resources Congress, National Water Resources Association, National Association of Rural Electric Cooperatives, Oahe

Conservancy Sub-district Bord of Directors, Basin Electric Power Cooperative, and Upper Missouri Water Users Association.

Mr. RICHTER. Mr. Chairman, in essence of time, I just would like to thank you, this committee, for the respect you have shown us previously and hope it continues. If you have any questions, maybe now would be a good time to turn it over to questions, if you have any.

Senator COCHRAN. Thank you very much.

[The statement follows:]

STATEMENT OF CHARLES A. RICHTER, CHAIRMAN, BOARD OF DIRECTORS, GARRISON DIVERSION CONSERVANCY DISTRICT

Mr. Chairman and members of the subcommittee, I am Charles A. Richter of New Rockford, N. Dak. As chairman of the board of directors of the Garrison Diversion Conservancy District, I am the authorized spokesman on this important matter of appropriations with which to continue construction of the Garrison diversion project during the fiscal year 1985. Mr. Chairman, the board of directors is pleased to support the President's budget of $53,580,000 for the fiscal year of 1985.

The Garrison diversion unit continues to have solid support from our congressional delegation, the Governor, the North Dakota Legislature, and hundreds of organizations and citizens throughout the State.

The 1984 fiscal appropriation allowed significant development to occur for the project. What we need now is for the President's budget to be enacted into law so we can continue to move full speed ahead on the first phase 85,000-acre development, all of which can be served without impacting the Canadian drainage system.

Mr. Chairman, there continues to be many positive signs on the horizon for the Garrison diversion unit. The mitigation and enhancement plan for the 85,000-acre first phase was approved and adopted by the conservancy district, the State, and the Department of Interior. This plan contains a major feature that mitigation and enhancement lands must be acquired from willing sellers as distinct from acquisition by eminent domain. It is a pleasure to tell you that over 100,000 acres of land have been offered for sale by willing sellers for mitigation and enhancement purposes. I am also pleased to inform you that 3,465 acres of land high in wildlife value was purchased in fiscal year 1984 for project purposes. We feel that the issue of mitigation and enhancement, which was troublesome to the conservancy district in the past, is now moving forward very positively.

We are also continuing our meetings with our South Dakota counterparts to assure South Dakotans that we will cooperate and work together to deliver water through the Garrison diversion unit to lands in the James River basin in South Dakota as a feasible means of augmenting the water resources of eastern South Dakota from the Missouri River.

Also, Mr. Chairman, the State of North Dakota and the conservancy district continue to work closely with the Department of Interior in the consultation process on the concerns of Canada. I am pleased to tell you that through these deliberations, a committee has been appointed made up of technicians from both Canada and the United States. This technical committee has had several meetings to review and evaluate technical and scientific data which addresses many of the questions which have arisen in the negotiation process. The conservancy district's policy has always been one of inviting Canadian technicians to take part in any research done in behalf of the project. The appropriation for fiscal year 1985 will allow the continued construction of the main supplyworks and the distribution and drainage system for the 5,000-acre test area in the Oakes section of the Garrison diversion unit. This very importnt test area will provide scientific data which will answer many of the questions which have been posed by the Canadians.

Mr. Chairman, this appropriation also means jobs for North Dakota. Money spent on the construction features of the project is very effective in providing employment opportunity for North Dakotans and those in the surrounding areas. This appropriation will have a significant impact on the work force of our construction industry.

As chairman of the Garrison Diversion Conservancy District, I want to take this opportunity to thank the committee for the support given our project in the past. We cherish this support and trust we will continue to have it in fiscal year 1985 and the years to come. The State of North Dakota and the conservancy district have worked very hard in their efforts to bring to North Dakota the Garrison diversion unit as an integral part of the yet to be completed Pick-Sloan Missouri basin project. This is a long-standing commitment to provide our people with a comprehensive water management program which will give them a sustained supply of excellent quality water. We will continue to direct our efforts to this end.

Thank you.

STATUS OF LOCAL SUPPORT

Senator COCHRAN. Senator Andrews, do you have a question?

Senator ANDREWS. Mr. Chairman, I have two or three questions. We would like to make the record a little more precise.

Governor, individual Members of Congress continue to hear the complaint that Garrison diversion lacks local support, and that the project is controversial in the State. Is this your impression as Governor of the current situation?

Governor OLSON. It is neither my impression nor is it fact, sir. Recent polls, one given by a very respected agency, University of North Dakota, indicates about 75 percent continuing support among the people of North Dakota for this project. There are other polls I have seen that tend to support that specific position. I believe it as a politician and a citizen in the State. It maintains strong public support.

PROJECT IMPACTS

Senator ANDREWS. Governor, each year the same questions are raised by the opposition relative to the project's impact on Canada, Indian tribes—water quality. I believe that as a result of consultations between our countries held last October a joint scientific review board was established. First, have you heard any new charges relative to the project's impact on Canada and, second, does this joint study——

Governor OLSON. No new charges I am aware of, sir. Second, we are very pleased that we have been offering to support and participate fully in this joint review team since the IJC report in 1977. For the first time, just within the last year or so, the Canadians have agreed to this approach and we now have a scientific technical team monitoring the Oakes test project to address the concerns raised by the International Joint Commission.

I continue to hear from certain private groups in Canada that suggest somehow the IJC and the boundary water treaties are being ignored. Most emphatically, they are not. We are complying fully, and the executive branch of our Government periodically consults with the authorized delegates from the Government of Canada. They take into consideration, in a formal sense under the Boundaries Water Treaty and the International Joint Commission and its report, the relationship that must and will continue in connection with this issue.

Senator ANDREWS. Am I correct in my recollection that over the past few years, those of us from North Dakota, aided by you and the Governor's office, have extended an open invitation to our Canadian friends to facilitate coming down, take test samples of fish, water, all the rest, isn't this essentially correct?

Governor OLSON. Absolutely. It is interesting to watch the Manitoba media, in fact, especially the newspapers, finally realized a year or so ago this was a standing offer made by North Dakota and the U.S. Government pursuant to the International Joint Commission report, and they finally accepted it.

APPROPRIATIONS HISTORY

Senator ANDREWS. There are also indications made by the very loud and raucous opposition that this year's appropriations will be the first one in a number of years, the first, in fact, since the famous IJC report in 1977. I know that is not true. You had a 4-year career as Governor, and before that you were North Dakota attorney general for 8 years, and in that capacity very active in support of the project. Is this your recollection of our appropriation system?

Governor OLSON. In regard to the preparation of my representation of North Dakota for the International Joint Commission hearings, my staff and I did a thorough historical review of this project and found that the first appropriations were made by the Congress of the United States in the 1930's to investigate the need for a project of this kind in the upper Missouri River basin. Periodically, since that time and throughout the last 10 years or so, I have been appearing in Congress on behalf of the project, appropriations have been made, legal restraints have been imposed, opposition has emerged, they have used the courts to delay the expenditure of some of those appropriations. But it is factually untrue that the Congress does not continue to support this project with the appropriations. Those appropriations have been restrained legally.

Senator ANDREWS. But it was support of the appropriations last year, the year before that, and so on?

Governor OLSON. Yes.

Senator ANDREWS. Finally, much is made of the IJC report that our Government is ignoring that report and the recommendations it made and in effect not going along with our Canadian neighbors in that respect. What is your response to those charges?

Governor OLSON. I resent those suggestions. Every observation, suggestion, implication, commentary that I can recall, both from the State of North Dakota and the U.S. Government through its Congress, has respected the concerns of Canada regarding this project. You have, as Members of Congress, restrained the appropriations appropriately, I might suggest, and North Dakota officials have continuously said that we are concerned that we not harm our Canadian neighbors. And any suggestion to the contrary is just simply not true.

Senator ANDREWS. Thank you very much, Governor, for an excellent statement and for the answers to the questions that I think make a more complete record.

Mr. Chairman, we appreciate your support and the support of this subcommittee in letting us present our case today. I might ask unanimous consent, Mr. Chairman, that other North Dakotans may have statements in support of the project and if those statements could be included at this point in the record if they are submitted to Senator Burdick's office or my office.

Senator COCHRAN. Without objection, it is so ordered.

Senator Stennis?

Senator STENNIS. I have no questions; you have a great number of witnesses. I am satisfied, though, based on past experience we will find this project strongly justified, well supported at home, and it will pass this committee favorably, in my prediction.

Senator COCHRAN. Governor, you have made a very persuasive presentation. We appreciate you taking time to travel this distance to be with us today. You have been a great help to the committee.

[The material follows:]

[Passed by the Oahe Conservancy Sub-District in South Dakota Mar. 9, 1984]

RESOLUTION 84–2

WHEREAS, the WEB Rural Water System will provide quality domestic water throughout a large area of northcentral South Dakota and will require sizable congressional appropriations to be completed in an efficient manner, and

WHEREAS, the Garrison Diversion Project in North Dakota will provide quality irrigation and domestic water to a large area of North Dakota; and be a source of domestic water, irrigation water for up to 100,000 acres and flood control if extended into South Dakota, and

WHEREAS, South Dakota urgently needs to utilize better domestic water, increase its agricultural productivity and reduce James River flooding, and

WHEREAS, South and North Dakota can benefit by working together to encourage Congress to fund their water projects since they each have only three congressional votes, and

WHEREAS, provisions to assure suitable water quality and quantity in the James River must be made to continue South Dakota support of the Garrison Project; or provide a Garrison Extension into South Dakota to accommodate additional available Missouri River water,

THEREFORE BE IT RESOLVED, the Board of Directors of the Oahe Conservancy Sub-district direct the Executive Committee to take all necessary actions to encourage the Congress to fully fund the WEB Rural Water System the Garrison Diversion Project, its extension into South Dakota or appropriate Garrison modification to insure suitable water quality and quantities in the James River,

FURTHER RESOLVED, the Executive Committee of the Oahe Board of Directors shall coordinate all policy and action relative to the Garrison Diversion Project with the Governor and the State Board of Water and Natural Resources,

FURTHER RESOLVED, that the WEB Board of Directors recognize the importance of working cooperatively with North Dakota in obtaining congressional funding for both WEB and Garrison,

FURTHER RESOLVED, that the Oahe Board of Directors work closely with the eight counties on the James River until the James River Water Development District becomes effective.

Adopted this 9th day of March, 1984

Chairman

Secretary

PREPARED STATEMENTS BY THE KENTUCKY DELEGATION

Senator MATTINGLY. Before calling the Tenn-Tom witnesses I want to make part of the record statements submitted by various members of the Kentucky delegation, including a statement from Senator Ford.

[The statements follow:]

STATEMENT OF GOV. WENDELL H. FORD OF KENTUCKY

Dear Mr. Chairman:

Since my schedule does not permit me to appear before your hearing on April 3, I am writing in support of Kentucky's civil works projects for Fiscal Year 1985 and ask that my statement be included in the hearing record.

I would like to express my appreciation to the Subcommittee on Energy and Water Development of the Senate Committee on Appropriations for their continued interest in flood control and water resource development in Kentucky, and particularly wish to thank Senator Walter D. Huddleston for his role in promoting awareness of Kentucky's needs among his colleagues.

While I offer my support for all requested appropriations, I would like to single out one project for comment -- the Big South Fork National River and Recreation Area.

Authorized in the Water Resources Act of 1974, the BSFNRRA was established by Congress with several objectives in mind. One of the primary goals was the economic development of the Kentucky/Tennessee area encompassing the project through increased recreation and tourism. In 1978, when the U. S. Army Corps of Engineers released its Master Plan, we were confident that this economic development would be forthcoming. Now we are told that, under a Reduced Scope Plan, most major projects will be omitted and others, greatly reduced, the reason being that the original funding allocation of $103 million is no longer sufficient to complete all projects.

The BSFNRRA is located in a depressed area that was anticipating a stronger and improved economic base through completion of the full project. It makes no sense that a project which was initially designed to foster economic growth not be allowed to reach fruition. There is no better way to spend federal tax dollars than by helping people help themselves. The BSFNRRA would bring about a return that would be many times the original investment.

I strongly urge that the Subcommittee on Energy and Water Development remove the $103 million spending limit on the BSFNRRA and appropriate whatever money is needed to fully complete the project.

With thanks for your consideration of this urgent problem,

STATEMENT OF REPRESENTATIVE WILLIAM H. NATCHER OF KENTUCKY

MR. CHAIRMAN, WE AGAIN WANT YOU TO KNOW THAT WE APPRECIATE THE OPPORTUNITY TO APPEAR AT THIS TIME IN BEHALF OF THE PROJECTS FOR KENTUCKY. KENTUCKY HAS MORE MILES OF NAVIGABLE STREAMS THAN ANY OTHER STATE IN OUR ENTIRE COUNTRY, WITH THE EXCEPTION OF ONE. DOWN THROUGH THE YEARS, WE HAVE SUFFERED DAMAGES FROM FLOODS AND LOSS OF LIFE.

In the Budget for Fiscal Year 1985, we have $3,100,000 to finish construction on the Taylorsville Lake which is located on the Salt River, about 60 miles upstream from its confluence with the Ohio River. This lake is located in Spencer County, Kentucky in the Second Congressional District, and is about three miles east of the town of Taylorsville, Kentucky and some 26 miles southeast of the City of Louisville. The lake lies in Spencer, Nelson, and Anderson Counties and was authorized by the 1966 Flood Control Act. The benefit cost ratio for this project was 2.1 to 1 and several months ago, a dedication ceremony was held and this reservoir was placed into operation.

MR. CHAIRMAN, you and the Members of your Subcommittee will be interested to know that now, in this part of the Salt River Basin, we have real flood control protection and in addition, much better water supply and recreational benefits which are of great concern to this part of the State of Kentucky. Spencer County has less than 6,000 people and on the second weekend after the dedication of the lake, nearly 25,000 people came into Spencer County to utilize this facility.

MR. CHAIRMAN, I want you and the Members of your Subcommittee to know that we appreciate your assistance with this project as this is another milestone in the development of the Ohio River Basin and the Commonwealth of Kentucky.

In addition, the Budget for Fiscal Year 1985 contains the sum of $433,000 for Operation and Maintenance of the Taylorsville, Kentucky Lake Project

MR. CHAIRMAN, I respectfully request that the two amounts set forth for the Taylorsville Lake project be approved for Fiscal Year 1985.

MR. CHAIRMAN, I respectfully request that the amounts set forth in the budget for Fiscal Year 1985 for operation and

MAINTENANCE OF THE BARREN RIVER LAKE, ROUGH RIVER LAKE, NOLIN LAKE, AND GREEN RIVER LAKE BE APPROVED.

MR. CHAIRMAN, AS YOU KNOW, SOME $830,000 HAS BEEN APPROVED FOR THE CAMPGROUND LAKE PROJECT, BUT SO FAR, THE COMMONWEALTH OF KENTUCKY HAS FAILED TO JOIN WITH THE CORPS OF ENGINEERS ON THIS PROJECT. THERE IS NOTHING FURTHER THAT YOU AND THE MEMBERS OF YOUR SUBCOMMITTEE CAN DO AT THIS TIME ON THIS PARTICULAR PROJECT. WE HOPE TO HAVE THE NECESSARY AGREEMENT SIGNED BY OUR NEW GOVERNOR AND THE CORPS OF ENGINEERS SOMETIME IN THE NEAR FUTURE. THIS WOULD THEN PERMIT THIS PROJECT TO GO FORWARD FOR ADVANCE ENGINEERING AND DESIGN AND LATER FOR CONSTRUCTION.

MR. CHAIRMAN, I JOIN WITH ALL OF MY COLLEAGUES FROM KENTUCKY IN THE HOUSE AND IN THE SENATE IN OUR REQUESTS FOR OUR STATE AND OUR DISTRICTS.

AGAIN, I WANT YOU TO KNOW THAT I APPRECIATE THE OPPORTUNITY TO APPEAR AT THIS TIME IN BEHALF OF THE PROJECTS FOR THE SECOND DISTRICT OF KENTUCKY. I WANT TO THANK YOU AND THE MEMBERS OF THIS SUBCOMMITTEE FOR YOUR SUPPORT AND ASSISTANCE ALL DOWN THROUGH THE YEARS.

STATEMENT OF REPRESENTATIVE ROMANO L. MAZZOLI OF KENTUCKY

MR. CHAIRMAN AND DISTINGUISHED MEMBERS OF THE SUBCOMMITTEE:

I THANK YOU FOR HAVING ACCEPTED OVER THE YEARS THE PETITIONS FROM THE KENTUCKY DELEGATION IN SUPPORT OF ENERGY AND WATER DEVELOPMENT PROJECTS IN THE COMMONWEALTH.

I EXTEND SPECIAL THANKS TO MY DISTINGUISHED COLLEAGUE, SENATOR WALTER "DEE" HUDDLESTON, FOR HAVING ARRANGED THIS APPEARANCE BY THE KENTUCKY DELEGATION.

I WOULD LIKE TO TESTIFY TODAY ON A VERY IMPORTANT PROJECT IN MY CONGRESSIONAL DISTRICT WHICH ENCOMPASSES LOUISVILLE AND MUCH OF JEFFERSON COUNTY, KENTUCKY, ON WHICH I HAVE WORKED CLOSELY WITH MY DISTINGUISHED COLLEAGUE IN THE HOUSE, CONGRESSMAN GENE SNYDER: THE SOUTHWEST JEFFERSON COUNTY FLOOD PROTECTION PROJECT.

THIS PROJECT CONSISTS OF A SERIES OF EARTH LEVEES, CONCRETE FLOODWAYS AND PUMPING PLANTS AND IS ENGINEERED TO PROTECT NEARLY 60,000 RESIDENTS, TWO INDUSTRIAL SITES AND SEVERAL HUNDRED COMMERCIAL UNITS IN THE AREA FROM THE FLOODING WHICH OCCURS ON ALMOST AN ANNUAL BASIS. OVER THE LAST 100 YEARS, RESIDENTS IN THE AREA OF JEFFERSON COUNTY IN THE SOUTHWEST HAVE BEEN VICTIMIZED BY OHIO RIVER FLOODS AT LEAST 75 TIMES.

MR. CHAIRMAN, LOCAL AUTHORITIES HAVE ALREADY COMMITTED OVER $9 MILLION FOR THIS PROJECT AND HAVE AGREED TO OPERATE AND MAINTAIN IT UPON COMPLETION AT A COST OF $117,000 A YEAR. THIS, I BELIEVE, DEMONSTRATES A STRONG LOCAL COMMITMENT FOR THE PROGRAM.

AND, THE UNANIMOUS ENDORSEMENT THIS PROJECT HAS RECEIVED OVER THE YEARS FROM OUR DELEGATION IN THE CONGRESS IS, I THINK, A FURTHER DEMONSTRATION OF THE COMMITMENT AND THE WORTHINESS OF THIS PROJECT.

MR. CHAIRMAN, 60% OF THE $72 MILLION TOTAL PROJECT COST HAS ALREADY BEEN APPROPRIATED BY THE CONGRESS AND THE PROJECT IS 54% PHYSICALLY COMPLETE. THE FULL $4.5 MILLION RECOMMENDED BY THE ADMINISTRATION FOR FISCAL YEAR 1985 IS ESSENTIAL FOR TIMELY COMPLETION OF THIS PROJECT -- SET FOR SEPTEMBER, 1987.

IN SUM, MR. CHAIRMAN, THE SOUTHWEST JEFFERSON COUNTY FLOOD PROTECTION PROJECT, IN MY JUDGEMENT, MERITS CONTINUED SUPPORT FROM YOUR DISTINGUISHED SUBCOMMITTEE AND I HOPE THAT YOU CAN RECOMMEND FULL FUNDING FOR THE PROJECT.

STATEMENT OF REPRESENTATIVE CARROLL HUBBARD, JR. OF KENTUCKY

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT, I APPRECIATE THIS OPPORTUNITY TO COMMENT IN BEHALF OF WATER PROJECTS IN OR DIRECTLY AFFECTING MY FIRST CONGRESSIONAL DISTRICT OF KENTUCKY. FIRST, I WOULD LIKE TO OFFER MY SUPPORT TO SEVERAL OF THE ITEMS LISTED IN THE FEBRUARY, 1984, U.S. ARMY CORPS OF ENGINEERS' CIVIL WORKS BUDGET REQUEST FOR FY 1985, AS FOLLOWS:

-- $3,707,000 FOR OPERATION AND MAINTENANCE OF BARKLEY DAM ON LAKE BARKLEY, KENTUCKY.

-- $10,000,000 FOR THE CONTINUATION OF LAND ACQUISITION AND CONSTRUCTION OF VARIOUS PROJECTS AT BIG SOUTH FORK NATIONAL RIVER AND RECREATION AREA, KENTUCKY AND TENNESSEE. SPECIFICALLY, FY 1985 FUNDS WOULD BE USED FOR THE CONSTRUCTION OF THE BANDY CREEK ACCESS ROAD AND THE INITIATION OF CONSTRUCTION AT THE BLUE HERON RECREATION AREA. FUNDS WOULD ALSO BE USED FOR THE DEVELOPMENT OF TRAILS AND THE CONTINUED DEVELOPMENT OF RECREATION FACILITIES AT BLUE HERON RECREATION AREA. THE COMPLETION DATE FOR THIS PROJECT IS SCHEDULED FOR SEPTEMBER, 1987.

-- $1,240,000 TO CONTINUE THE MAJOR REHABILITATION OF LOCKS AND DAM 53, KENTUCKY AND ILLINOIS. THE FUNDS PROVIDE FOR THE CONTINUATION OF MAJOR REPAIRS FOR THE DAM WITH THE ANTICIPATED COMPLETION DATE SET FOR JUNE, 1986.

-- $1,800,000 FOR THE REPLACEMENT OF OUTDATED LOCK AND DAM AT SMITHLAND LOCKS AND DAM. FUNDS FOR FY 1985 WOULD BE USED PRIMARILY TO PUT THE FINISHING TOUCHES ON THE LOCK AND DAM WHICH WAS REPLACED WITH FY 1984 FUNDS, AND FUNDS WOULD ALSO BE USED TO CONTINUE CONSTRUCTION OF RECREATIONAL FACILITIES. AMONG THE RECREATIONAL FACILITIES BEING FUNDED ARE CONSTRUCTION OF A BOAT RAMP AND PARKING AREA AT GIBBONS CREEK, KY, CONTINUATION OF construction work on a boat ramp and parking area at Dyer Creek, KY, and the continued construction of a boat ramp and parking area at the old Lock and Dam 50 site. The anticipated completion of this project is scheduled for September, 1987.

-- $1,822,000 for operation and maintenance of the Green and Barren Rivers, KY. FY 1985 funding would be used for a repair of the miter gates at Lock 2.
-- $9,740,000 for operation and maintenance of the Ohio River Open Channel Work in Kentucky, Pennsylvania, West Virginia, Ohio, Indiana and Illinois.
-- $34,763,000 for operation and maintenance of the Ohio River Locks and Dams, Kentucky, Pennsylvania, West Virginia, Ohio, Indiana and Illinois.
-- $363,000 for operation and maintenance of Hickman Harbor, Kentucky.
-- $155,000 to finalize a study of Mayfield Creek and Tributaries, Kentucky. The funding would be used to finalize the selected plan of improvement and to prepare, review and coordinate the draft and final report at Mayfield Creek. FY 1985 funds would be used to complete the study and continue consideration of alternatives for developing a comprehensive plan for flood control and drainage in the approximately 440,000 square mile Mayfield Creek basin area.

In addition to the projects mentioned above which are of special interest and importance to my First Congressional District of Kentucky, I would like to also offer my support to all projects related to the maintenance and improvement of the Ohio River, the Cumberland-Tennessee Rivers, and Lake Barkley, as well as to all of the water projects which have been developed by the U.S. Army Corps of Engineers for the Commonwealth of Kentucky. It is common knowledge that water resources are of vital importance to the residents of Kentucky

AND ESPECIALLY TO MY CONSTITUENTS IN WESTERN KENTUCKY, FROM BOTH A RECREATIONAL STANDPOINT AND AN ECONOMIC STANDPOINT. THEREFORE, I AM PLEASED TO ENDORSE THE U.S. ARMY CORPS OF ENGINEERS' PROPOSED FUNDING FOR ALL OF KENTUCKY'S WATER PROJECTS.

AT THIS TIME, I WOULD ALSO LIKE TO CALL TO YOUR ATTENTION THE LACK OF FUNDING FOR A STUDY ALONG THE TRADEWATER RIVER. THE ARMY CORPS OF ENGINEERS HAS AUTHORIZATION FOR A FLOOD-CONTROL STUDY ALONG THE TRADEWATER RIVER, BUT AGAIN, NO FUNDS HAVE BEEN APPROPRIATED FOR THIS PURPOSE. I, THEREFORE, WOULD LIKE TO RENEW MY REQUEST THAT $50,000 BE APPROPRIATED FOR A STUDY OF THE LOWER REACHES OF THE TRADEWATER RIVER FROM BLACKFORD AND DAWSON SPRINGS, KENTUCKY, TO THE PLACE WHERE THE TRADEWATER RIVER CONVERGES WITH THE OHIO RIVER, TO ASSESS THE DAMAGE CAUSED BY THE CONSTRUCTION OF THE SMITHLAND DAM AND ITS EFFECT ON THE LOWER END OF THE TRADEWATER RIVER. THIS COVERS APPROXIMATELY TWENTY OF THE NINETY MILES OF THE TRADEWATER RIVER.

THANK YOU FOR ALLOWING ME THIS TIME, AND I APPRECIATE YOUR CONSIDERATION OF MY COMMENTS AND REQUESTS FOR FUNDING OF THE PROJECTS TO WHICH I HAVE REFERRED.

STATEMENT OF REPRESENTATIVE GENE SNYDER OF KENTUCKY

Mr. Chairman; Distinguished Members of the Subcommittee; I am pleased to once again join my colleagues from Kentucky in front of you to direct your attention to the projects which mean so much to the citizens we represent.

As always, I appreciate your making this time available to us.

SOUTHWESTERN JEFFERSON FLOODWALL

The major project now underway in the Fourth District, of course, is the Southwestern Jefferson County Floodwall. It is a system of earth levels, concrete floodwalls, pumping plants and related items designed to protect 32 square miles of flood plain -- some 24,100 acres in Jefferson County, Kentucky. Development in the area is currently valued at over one and a half billion dollars.

It is a valuable project -- the annual benefits are estimated to be in the neighborhood of 8.23 million dollars. Sixty percent of the estimated Federal cost has already been allocated and this year's request of 4.5 million dollars for Fiscal Year 1985 will boost that to 67 percent.

It's a good project.

FALMOUTH DAM

Mr. Chairman, I am also seeking the Committee's approval of $300,000 to initiate the Falmouth Dam project near Falmouth, Kentucky. These funds represent the Corps' Fiscal Year 1985 capability for this project, which would control flooding on the Licking River and was authorized in 1936 and modified in 1938. For some time the project has been in an inactive status, primarily because of an inability to reach an agreement on recreation cost sharing.

H.R. 3678, the Water Resources Conservation, Development, and Infrastructure Improvement and Rehabilitation Act of 1983, will soon be before the House. Section 301 (B) of this bill makes the necessary modifications to allow the Falmouth project to finally be implemented.

I want my constituency to realize the benefits of this project as soon as possible. If we can begin this year to fully fund the Corps, capability for this already authorized project, then we will be able to enjoy flood protection in Falmouth that much sooner. This is certainly a priority consideration for the residents of this area who have been subject to flooding almost annually. Following the 1964 flood, Mr. Kenneth Marquette wrote about the fear and terror of those who had to be rescued by boat from their homes. Mr. Marquette observed that "Such a pitiful sight I hope never to see again." I ask this distinguished Subcommittee to help us this year to begin to realize Mr. Marquette's hope by including $300,000 in the Energy and Water Appropriation.

STREAMBANK EROSION PREVENTION & CONTROL DEMONSTRATION PROGRAM & WATER SUPPLY REHABILITATION & CONSERVATION.

In closing, I would like to bring to the Subcommittee's attention two other portions of the Water Resources Conservation Development and Infrastructure Improvement & Rehabilitation Act of 1983 in which I am very much interested -- section 507 which directs the Secretary to establish and conduct for a period of five years at sites on the Ohio River and its tributaries a streambank erosion prevention and control demonstration program -- and Title VIII, subtitle A, which establishes a loan program to begin addressing the pressing water supply problems that face our nation.

When H.R. 3678 is enacted, authorizing these programs, I hope the Subcommittee will give these two important programs, in particular, favorable consideration.

Again, I thank you for your time.

STATEMENT OF REPRESENTATIVE LARRY J. HOPKINS OF KENTUCKY

Thank you for this opportunity to address the Subcommittee on Energy and Water Development of the Senate Appropriations Committee concerning Army Corps of Engineers projects in the Sixth District of Kentucky.

I have been addressing the Subcommittee annually since coming to Congress to request funding for Locks 5 through 10 on the Kentucky River. This area is renown for its scenic beauty and attracts tourists from throughout the area.

Last year for the first time, the locks remained closed in caretaker status throughout the summer. The Corps of Engineers decided the cost of operating the locks, even on a reduced basis, could not be justified in light of current budget restraints.

A year ago I asked the Subcommittee to appropriate money for the Corps to restore the locks to a workable state in order for the State of Kentucky to resume control and the cost of operation. Some very important developments have taken place since that time.

The Kentucky legislature has approved a bill (H.B. 987) to allow the Cabinet for Natural Resources and Environmental Protection to charge a $5.00 user fee to recover some of the costs of operation. The bill also directs the cabinet to negotiate with the Corps of Engineers to assume control of the locks. The bill appropriates $300,000 for the next biennium for the cabinet to maintain the locks and would also allot $25,000 for 1984 and 1985 to reopen the locks.

The legislature was not in session when I addressed the Subcommittee last year, therefore, I could only predict that they would be very interested in seeing the State operate the locks. This interest is now in writing in the form of H.B. 987.

Therefore, I ask the Subcommittee to appropriate the sums necessary to make the needed repairs to the Kentucky River Locks 5 through 8 which the Corps of Engineers failed to keep up with. The State of Kentucky has made a generous offer to assume control of the locks, but they do not have the resources to make up for past neglect by the Corps. The required amount is $400,000 and is broken down as follows:

Lock #5 -- $50,000 to repair timbers on miter gate leaves
Lock #6 -- $62,500 to repair holes on apron of dam
Lock #7 -- $250,000 to repair lower miter gate leaves
Lock #8 -- $30,000 to repair timbers on miter gate leaves

Thank you for your time and attention to this matter. I hope the Subcommittee agrees to my request and makes this the last request I will submit for funding for the Kentucky River Locks.

PREPARED STATEMENT OF CONGRESSMAN ROGERS OF KENTUCKY

Senator MATTINGLY. Congressman Rogers of Kentucky has submitted a prepared statement on this project and, without objection, that will be incorporated in the record at this point.

[The statement follows:]

STATEMENT OF REPRESENTATIVE HAL ROGERS OF KENTUCKY

I appreciate the opportunity to testify before the subcommittee in support of water projects essential to the Fifth District of Kentucky. And I'd like to thank the distinguished chairman and the ranking minority member for all their past assistance to me and my district.

LEVISA AND TUG FORKS OF THE BIG SANDY RIVER AND THE UPPER CUMBERLAND RIVER

I'd like to begin by highlighting a particular problem we're confronting with the construction of this project and then proceed to a more general discussion of the need for this flood protection.

As the Committee is aware, over the past few years, there have been repeated roadblocks thrown up in the way of the 202 project. At each point, this subcommittee has issued clear instructions to the Corps--only to find new excuses for delaying construction cropping up.

The latest in this series of roadblocks concerns the scope of the project to be built in Barbourville, Kentucky. After learning of Corps plans to reduce the scope of the plan several years ago, language was included in the 1982 Supplemental Appropriations bill requiring the construction of Standard Project Flood protection in the 202 project. Despite these clear instructions, however, the Administration is narrowly defining this language and is refusing to build at the SPF level in Barbourville.

SPF would require construction of a cut-through channel and raising the levees in Barbourville. The Administration proposes to simply construct the cut-through.

Mr. Chairman, the District Corps office has stated explicitly that SPF construction is needed to prevent catastrophic overtopping. They cite the severe destruction that could result from overtopping. And they say that construction of the cut-through without the levee would make flooding TEN TIMES more likely than if we had the levee work as well.

By eliminating the levee work, the Corps would save about $12 million. But considering the clear threats to life and limb, as confirmed by the District Corps office, considering the possible loss of property--in view of the fact that the neighboring town of Pineville sustained $27 million worth of damage nearly overnight as a result of the 1977 floods, this $12 million would be money wisely invested.

I have with me today the mayor of Barbourville, Charles Buchanan, who will provide the committee with additional details on this problem. And I would like to ask the committee to include specific language in this year's bill requiring construction of SPF protection in Barbourville.

In addition, I'd like to state my clear and unequivocable support for the continued funding of the overall 202 project. Few areas in our country have suffered more as a result of flooding and few areas so deserve support to prevent future flooding as this area in my district.

Major floods have inundated these towns from their earliest years. The steep slopes in the surrounding coal-laden mountains cause very rapid run-offs and shorten the warning time of an impending flood.

It was just 7 years ago that the Flood of '77 hit the communities in my district and surrounding states with this frightening and devastating speed. Three years ago, Mayor Buchanan again joined me here, to tell you how his town came within inches of being obliterated by the flood waters of the Upper Cumberland. It was only through the heroic efforts of some five hundred volunteers--volunteers who ignored all the threats to their own safety, who ignored the warnings to evacuate the city, and who stayed behind to pile the sandbags on top of the levees--that disaster was prevented.

Pineville wasn't so lucky. The water rushed over the levees and floodwall, which were just too low, and came pouring into the town. And the residents of Pineville are still paying the price for this flood--a cost which far exceeded the immediate $27 million worth of damages.

Nine hundred homes were destroyed or severely damaged. This forced property owners into long-term debt which continues to burden many families throughout this region. And frankly, if another flood were to sweeep through the streets of these communities, I don't believe these families would be able to absorb the costs of additional debts.

Flooding has devastated property values in these communities. For example, Pineville's pre-flood total property market value was $19.3 million. In 1980, the total property value came only to $17.9 million, a fall of 11%. And if inflation is taken into account, and the property value is considered on the basis of real dollars, property values fell by a staggering 40%. I'm sure the members of this subcommittee realize the impact this can have on the financial stability of any community.

In addition, the District Corps' Decision Document outlines other aspects of the economic impact of flooding. This document describes Pineville as a seat of government, service and retail trade. It states clearly that if there were to be any further disruption of this normal commerce, such as occurred in 1977, the town would fall into a condition of serious deterioration. Residents and merchants would evacuate the town, the government services might be moved elsewhere, and perhaps even parts of the community hospital would be moved away. To put it in the Corps own words, "Future conditions without project literally means a future without hope for the citizens of Pineville."

So not only does flooding threaten the very life and safety of the communities all along the Upper Cumberland, but it directly determines the economic well being and development of this area. Because no matter how hard these communities work to help themselves, they will have no hope for success if the flooding continues as a persistent threat. They will have no reasonable basis for attracting industry and businesses will be understandably reluctant to locate in a community which is the victim of flooding.

These communities are struggling to help themselves--I urge this subcommittee to support the continuation of funding for this flood control so we can help them to help themselves. The Corps has requested $10 million for the 202 project this year and I urge the Committee's support for this funding, in addition to the language concerning the scope of the project in Barbourville.

BIG SOUTH FORK NATIONAL RIVER AND RECREATION AREA

The next project I'd like to bring to the Committee's attention is the Big South Fork National River and Recreation Area.

Mr. Chairman, the Congress will make many difficult budget decisions this year. More than ever before, programs are being evaluated in terms of whether they are essential, whether they constitute a legitimate function of the federal government, and whether they will unleash private efforts that will lead to more jobs, more businesses, more thriving local communities.

The Big South Fork stands up admirable to this line of investigation.

Big South Fork is a unique natural wonder. With its river and gorge, it has the potential to become the Yellowstone of the East. With its combination of waterways, mountains and forests, along with a wide range of recreational opportunities, it will offer a broad choice of vacation possibilities to individuals and families.

And these exciting vacation possibilities will be accessible to tourists from the nearby urban areas who may not be able to afford longer trips to distant vacation spots.

But Mr. Chairman, exciting as these possibilities are, they don't show what I see as the special thrill of Big South Fork.

Bit South Fork is expected to attract more than 1 million visitors each year to McCreary, Pulaski and Wayne Counties, as well as to the neighboring counties in Tennessee. They will require service stations, restaurants, campgroupds, shops and motels--businesses and services which the men and women in my district are willing and able to provide.

These visitors will have a substantial and beneficial impact on the local economies. In 1986, they are estimated to spend $42,656,000 locally; in 1991, this figure is expected to reach $93,841,000. Since in 1978, the total lodging, restaurant, amusement and recreation-based revenue in McCreary County totaled only $956,000, the potential for economic development as a result of Big South Fork is absolutely enormous.

And these additional revenues will mean jobs. These are jobs right at home, so that the men and women of my district will not have to leave their homes and families to find work. It is expected that there will be at least 1761 new jobs as a result of the Big South Fork in 1986 and 3876 new jobs by 1991--and these are conservative estimates.

And the spinoff effects from these jobs will contribute to the economic development of these communities. And since they have long suffered from chronic unemployment and underdevelopment, these benefits are particularly needed.

Mr. Chairman, the Corps has requested $10 million for construction at Big South Fork. This funding is greatly needed to help these communities to help themselves and I would urge the subcommittee's support for this request.

UPPER CUMBERLAND RIVER BASIN STUDY

I would like next to bring to the subcommittee's attention a particularly important, ongoing project--the Upper Cumberland River Basin Study.

This study is vitally important to investigating the problems of flooding and allied water issues along the Upper Cumberland River Basin.

At this time, the Corps is conducting a desperately needed investigation of the water problems in four counties of my district--Bell, Harlan, Whitley and Knox. On the one hand, these communities suffer from frequent flooding. On the other hand, the primary source of drinking water is private wells, many of which are going dry and many of which are contaminated or are of extremely poor qulity. The completion of the investigations in these four counties, along with the remaining investigation of the water problems along this river basin are essential to identifying solutions in years to come. To cut off funds for this study would be tantamount to a decision to ignore the serious needs of these communities.

Unfortunately, no funds have been requested for this study in FY85. The Corps tells me that their capability is for $150,000. I would therefore like to ask the subcommittee to include $150,000 in this year's bill for the continuation of this study.

WOLF CREEK DAM

The Wolf Creek Cam constituted the first phase of the Cumberland Lake Project, beginning in 1950.

Originally, the Dam was intended to control flooding and to generate hydroelectric power (it now has six generators and generates approximately one billion kilowatt hours of electricity per year).

In addiition, the Lake offers a fisherman's and boater's paradise, with the serene beauty of its still waters and the surrounding tree-covered mountains.

I advocate that the Committee approve the $4,076,000 in operation and maintenance funds requested by the Corps.

LAUREL RIVER LAKE

The Laurel River Lake promises to be a welcome addition to Eastern Kentucky's tourist attractions.

It is estimated that the Lake will attract up to a million visitors per year--which could certainly represent important tourist dollars for this region.

The Administration has requested $778,000 for operation and maintenance and I urge support for this funding level.

MARTIN'S FORK LAKE

Finally, I would like to state my strong support for the $511,000 in Operations and Maintenance funds for this lake in Harlan County.

This lake is important in two regards. First, it helps to reduce the flood elevation in Pineville by more than a food. And second, it offers the greatly appreciated side benefits of recreational opportunities for local residents.

I certainly urge the committee to adopt the Administration's request.

CONCLUSION:

Mr. Chairman, the projects I have outlined include a wide variety of projects, including both flood control and major tourism development. But these projects all have the same objective: they will help the people in these communities to help themselves. They will offer protection from the annual threat of the rising waters in the spring. And they will provide the needed seed money to spur a major tourism industry in a depressed region.

Each of these projects is essential to the well-being of the communities involved and each is a prudent expenditure of taxpayer money. The Committee has supported these projects in the past and I would like to ask for their continued support.

ALABAMA WATER RESOURCE PROJECTS

STATEMENT OF HON. JEREMIAH DENTON, U.S. SENATOR FROM ALABAMA

Senator COCHRAN. At this time I would like to recognize Senator Denton and Senator Heflin of Alabama. I know Senator Denton came for this specific purpose of presenting Alabama witnesses appearing before this committee today. I know the Senator would probably like to make that presentation.

Senator DENTON. Mr. Chairman, Senator Heflin is here also for the same purpose so I will defer to him as the senior Senator from the State.

Senator HEFLIN. I just got back from Alabama, and I told him——

Senator COCHRAN. I am going to let you all work that out. [Laughter.]

Senator DENTON. I am recovering from a little peneumonia. I am not contagious they tell me.

Thank you, Mr. Chairman, and thanks to Senator Stennis, because this is a big day for the folks who are now about to take the witness stand, as it were, and I am honored to appear with them and any friends who support funding for the Apalachicola-Chattahoochee-Flint, the Warrior-Tombigbee Waterway, the Gulf Intercoastal Waterway, and the Port of Mobile.

TENNESSEE-TOMBIGBEE WATERWAY

As you might know, Mr. Chairman, and certainly your ranking minority, senior member knows, today is a very special day for the supporters of the Tenn-Tom Waterway. For the first time since 1972, they come before your committee not asking for construction funds for our dearly beloved waterway, and I know you are aware of that, Senator Cochran, because you have worked on this, too. This waterway's construction is 21 months ahead of schedule, but you know that very well also. I am delighted and very proud that the Tenn-Tom is expected to be completed on June 1, 1985.

We are very pleased that the President decided to include $11,763,000 in its fiscal year 1985 budget for Tenn-Tom operation and maintenance, and I would like, Mr. Chairman, to take a moment to recognize Glover Wilkins who is sitting behind me on my left, the administrator of the Tennessee-Tombigbee Development Authority, known to his friends, and that certainly includes Senator Heflin, and to me as the "Huck Finn of the Tenn-Tom." He is retiring in June of this year. We are all sorry about that, and having served as administrator for the Tenn-Tom Development Authority since 1962, completion of this waterway was a boyhood dream of his.

He grew up on the river, around the river, and his ambition and vision was to leave a legacy his children and grandchildren can be proud of, and he is doing that, Mr. Chairman.

I will submit my longer, two longer statements for the record, one on the Tenn-Tom and one on the Warrior-Tombigbee. Thank you. I will return to the office because I am not feeling so well. I do thank you.

Senator COCHRAN. Thank you for being here. We appreciate your contribution to the hearing and your leadership on these projects. Thank you very much. We hope you get well, soon.

[The statements follow:]

STATEMENTS OF SENATOR JEREMIAH DENTON

TENNESSEE-TOMBIGBEE WATERWAY

Mr. Chairman, members of the committee, today is a very special day for the supporters of the Tennessee-Tombigbee Waterway, for it is the first time since 1972 that we have come before your committee not asking for construction funds for our dearly beloved waterway. As you know, Mr. Chairman, and we will probably keep reminding you, this waterway's construction is 21 months ahead of schedule. I am delighted and very proud that the Tenn-Tom is expected to be completed on June 1, 1985.

Mr. Chairman, as you know, from its inception I have been deeply committed to completion of the Tenn-Tom. With continued support from the administration and Congress, the Tennessee-Tombigbee will soon become a vital component of our national transportation system, helping to secure America's position as a leader in international trade and commerce. Equally important, the completion of the waterway will enhance America's national security interests. It is now, and will increasingly become, a strong factor in reducing unemployment.

Mr. Chairman, we have come a long way with the Tenn-Tom and much of its progress is due to the vision of one man—J. Glover Wilkins, the administrator of the Tennessee-Tombigbee since 1962. The 232-mile-long waterway is a tribute to his fulfillment of a boyhood dream. Glover Wilkins grew up around the river and is known to his friends as the Huck Finn of the waterway. He is retiring in June of this year and leaves behind a legacy his children and grandchildren can be proud of.

The entire project is now over two-thirds complete. More than 160 miles of navigational channel have been constructed and the entire waterway is scheduled for completion in June 1985. It is now opened for limited navigation from Columbus, Miss., to Demopolis, Ala., where it joins the existing Warrior-Tombigbee Waterway leading to the Port of Mobile.

The completion of the Tennessee-Tombigbee will greatly enhance our prospects for intrastate, interstate, and international trade. The potential benefits of the Tenn-Tom are recognized by many authorities both in and out of government. For example, in a letter written to me by my good friend Bill Brock, the U.S. Trade Representative, he said: "I believe the Tennessee-Tombigbee project has the potential to provide important benefits for shipping interests and foreign commerce. This is especially important for U.S. coal exports and agriculture commodities. Increased shipping capacity on the Tennessee-Tombigbee can do much to encourage and facilitate international trade and to strengthen our national economy."

Mr. Chairman, that's a pretty good endorsement and one that can be appreciated in these times when we need to do everything possible to strengthen our domestic economy.

I should add that completion of the Tenn-Tom will mean substantial contributions to our balance of payments, adding up to billions of dollars by the year 2000. Expanding world coal and grain markets alone offer great opportunity for the United States.

The benefits of trade, which would be reason enough for me to support the waterway, are not the only reasons our Nation should support the completion of the Tenn-Tom.

In peacetime, it is easy for Americans to forget the role our Nation's waterways played during World War II. Our waterways made it possible to transport thousands of seagoing vessels to the sea from inland shipyards; made possible the widespread geographical diffusion of essential manufacturing industries that otherwise would have been forced into the vulnerable and congested coastal areas, overburdening port systems for transferring cargo from land-based transport to seagoing ships; and eased the burden placed on other forms of transportation by increased traffic related to wartime activities.

The inland waterway system made the difference between keeping industrial plants on the eastern seaboard and Midwest open and operating at full speed or curtailing operations; of providing fuel for our troops and citizens or having them immobile and freezing; and of shipping tanks and planes, or leaving our troops without air and armor support.

One of the most remarkable wartime achievements of the inland waterway transportation industry was its very successful participation in the floating of war vessels from inland shipyards to the sea. The Army, Navy Maritime Commission, and War Shipping Administration found it imperative to provide for supplies and ordnance along our navigable waterways. More than 4,000 vessels carried torpedo tenders, coastal transports, auxiliary repair ships, aircraft rescue vessels, destroyer escorts, oceangoing cargo ships, floating cranes, Coast Guard cutters, landing craft (infantry), tanks, patrol craft, subchasers, tank-landing ships, and submarines. In addition, 43,744 tons of structural ship sections were moved to shipyards by inland waterways.

The Tenn-Tom will add markedly to those defense propensities. Further, one of the most valuable commodities needed during a wartime or emergency situation is petroleum. The 232-mile-long Tennessee-Tombigbee is well suited for that commodity. During World War II, the waterways helped to make up for the loss in petroleum shipments caused by the withdrawal of other services and by the sinkings of coastline tankers.

Finally, Mr. Chairman, the Tenn-Tom means jobs. Currently, 10,000 people are employed in constuction work and related activities on the waterway. In addition, about $47 million in subcontracts for waterway-related construction have been forwarded to small and disadvantaged businesses in the waterway corridor.

A 1976 study by the Appalachian Regional Commission predicted that the Tenn-Tom Waterway alone will create about 136,000 new jobs in the four-State region that has one of the highest unemployment rates in the Nation.

Of even more importance is the fact that those jobs are related to major capital investments involving chemical, paper, and steel products.

In summary, Mr. Chairman, the United States has reached a point in its history where major decisions must be made—strategically to rebuild our security; and economically in terms of influencing both international trade and unemployment.

This is why President Reagan included $11,063,000 in his fiscal year 1985 budget for operation and maintenance. President Reagan and this administration want to do everything possible to see that the Tenn-Tom is completed.

WARRIOR-TOMBIGBEE WATERWAY

Mr. Chairman, members of the Senate Energy and Water Resources Subcommittee, I thank you for allowing me the opportunity to express my support for the Warrior-Tombigbee Waterway.

As you know, Mr. Chairman, we are blessed with strategically located navigable waterways in Alabama. The busiest of our waterways is the Warrior-Tombigbee, which flows from the coal-rich Warrior basin in northwest Alabama through the industrial heartland around Birmingham and south to the Port of Mobile.

The purpose of my testimony is to seek committee support to authorize funding for the Warrior-Tombigbee Waterway. The President has requested $12.9 million for fiscal year 1985 but I am told by the members of the Warrior-Tombigbee Development Association that this is an inadequate amount for a normal operation and maintenance program. Of the $12.9 million, $3.5 million is to fund the initiation of a program to improve channel efficiency and reduce regular operation and maintenance in future years. Unfortunately, that won't be of much help during fiscal year 1985. The Warrior-Tombigbee needs about $3.5 million added to the $12.9 million.

In Alabama, shipments of ore, steel, and related products are expected to more than triple by 1985 because of new and modern manufacturing capabilities in Alabama steel production facilities. Confidence in the continued efficiency and modernization of the waterway were important in U.S. Steel's recent decision on reactivation and further modernization of its Fairfield facilities. Efficiency and reliability will be significant factors in the competitiveness of all the facilities in Alabama. Thousands of jobs hang in the balance, critical to an area with unemployment among the highest in the Nation.

Some estimates indicate that 10 percent of our Nation's coal reserves are located in the Warrior basin. Almost 80 percent of the coal traffic handled by the Port of Mobile arrives there by barge from the Warrior basin, and over 4 million tons of coal move via this waterway to the electric generating plants in our area. We have a number of large and experienced mining operations in the area, as well as others capable of substantial growth. The development of the coal reserves, the skills and experience of our people, and the growing worldwide demand have created new demands on the waterway.

Farmers from 21 Alabama and Mississippi counties ship their grain to Mobile for export via the waterway. Several thousand American farm families are dependent on the waterway for efficient transportation of their products. In Alabama, as in the Nation, the largest cash crop is soy beans.

There are many other commodities moving on the waterway, such as ores, crude and fuel oils, steel products, chemicals, aggregates, and wood products. Related industries, though still affected by the worldwide recession, plan to grow and modernize. The ever-increasing demands require that the Warrior-Tombigbee operate at peak efficiency on a full-time basis.

The Warrior-Tombigbee Waterway currently has a system of modern locks and dams, with the exception of the William Bacon Oliver lock and dam. Although prior to the late 1970's the waterway had operated in a generally efficient and reliable manner, we now have a new set of circumstances. Those new circumstances reflect not only the impressive increased use of the waterway and the ravages of time and the elements, but even more the increasing worldwide demand for energy and food picture. Mr. Chairman, that demand will continue to grow. As you know, the Oliver replacement has now been favorably reported by the Board of Engineers for Rivers and Harbors and our congressional delegation is committed to support funding for its replacement.

Mr. Chairman, I also believe strongly that replacement of the Oliver lock and dam on the Warrior-Tombigbee is essential. I recently testified before the Senate Environment and Public Works Committee to seek the support of the chairman of the committee, Senator Abdnor of South Dakota, for authorization of replacement funds. Senator Abdnor has assured me that he will support an authorization to fund the replacement of the Oliver lock and dam.

It is noteworthy that, because of the antiquated, outdated Oliver lock and dam, barge traffic on the Warrior-Tombigbee can not operate with maximum performance and efficiency and has encountered a serious bottleneck.

Oliver was built before World War II and today is substandard in design and dimension at 95 feet by 460 feet. The other locks on the waterway are 110 feet by 600 feet. They were completed and opened to navigation between 1954 and 1975 and are of modern design and dimensions. The smaller dimensions of the Oliver lock chamber were selected in the early 1930's when the typical size of a barge was 25 feet by 140 feet, and towboats were not as powerful as they are today. At that time, traffic along that portion of the river hovered around 700,000 tons per year. Since that time, the amount of traffic increased to 15 million tons by the late 1970's. This trend is expected to increase into the 1990's. Interim steps are being taken to ameliorate the situation and to allow traffic growth to continue, pending construction of a new, full-size lock. Yet even with these temporary improvements, there is a practical upper limit tonnage that is able to pass through Oliver lock. That annual of 25.5 million tons is projected to be reached by 1987, just 4 years from now.

I believe that it makes little sense to have made large capital investments in waterway projects throughout the Nation, yet not provide for updating and upgrading for replacement facilities, at a level at which taxpayers can realize the benefits of their initial investment. This is somewhat like buying a new car and then not buying new tires for it when the old ones wear out, or not having the car tuned up or winterized so that it can be driven at maximum performance.

Mr. Chairman, I believe that our country has reached a point in its history where major decisions must be made about the future of our waterways and ports. Those decisions will affect our interstate, intrastate, and international trade, as well as our unemployment situation. I urge the subcommittee to do everything possible to assure that our waterways are maintained and operated, helping to secure America's position as a competitive leader in international trade and commerce. Everyday Americans who mine, manufacture, process, farm, and work at construction-related jobs depend heavily upon waterway transportation to get their goods to market.

Millions of dollars have been invested in the Warrior-Tombigbee by industry, farmers, and government agencies, providing thousands of jobs. I would like to remind you that, less than 2 years ago, Alabama had the second highest unemployment rate in the Nation. Unemployment has been reduced in Alabama, in part because of expanding industries like the ore, steel, coal, and agricultural industries that use the Warrior-Tombigbee. If we do not continue to upgrade and maintain our waterways, jobs for countless thousands of Americans could be jeopardized. The replacement of the Oliver lock and dam is essential to Alabama and to the Nation if we are to remain competitive with other countries seeking to capture our world markets. It is also essential if we are going to continue to reduce unemployment and improve our economy.

TENNESSEE-TOMBIGBEE WATERWAY

STATEMENT OF HON. HOWELL T. HEFLIN, U.S. SENATOR FROM ALABAMA

Senator COCHRAN. Senator Heflin?

Senator HEFLIN. Thank you, Mr. Chairman. If this committee and the Senate was composed solely of Mississippians and Alabamians, I think we could make a lot of progress. I am delighted to see the two distinguished Senators from Mississippi who have been interested in this water project, who have been in the forefront, who have been our leaders on the Tennessee-Tombigbee in many battles we have had here to date.

We have a group of distinguished Alabamians, including Bill Rushton, the administrative executive to Governor Wallace, who is here to testify, as well as other Alabamians. I have prepared statements—a general statement in behalf of Alabama water resource development projects and a statement in behalf of the Tennessee-Tombigbee Waterway—and I might comment that it is now 93-percent completed as it would apply to its navigable portions and completion is anticipated in June 1985, the first boat will travel the entire distance of the Tennessee-Tombigbee Waterway. We all want to be on that first boat. We are looking forward to that day.

The budget requests funds for the operation and maintenance of the Tennessee-Tombigbee, some studies, various other things. I ask that my statement on the Tennessee-Tombigbee Waterway be printed in full.

OTHER ALABAMA WATER DEVELOPMENT PROJECTS

I also have a statement for the Warrior-Tombigbee Waterway and Mobile Harbor. Two of the most important projects today in Alabama include Oliver lock and dam and the Port of Mobile. There are a number of requests made relative to these projects and we hope that the committee will give their careful consideration to this as well as all of the requests dealing with the waterways in Alabama.

Coosa-Alabama Waterway

I also have a prepared statement for the Coosa-Alabama River system. There is need for operation and maintenance fund for five major projects along the Coosa-Alabama Waterway and this is a very important project. It will be navigable a distance of 345 miles. This became a reality about a decade ago. We hope to go on with the Coosa, make it navigable to Rome, Ga. There is a budget request relative to a survey study of the Alabama River below the Cleveland lock and dam as well as some other requests and we ask those requests be given careful consideration.

Apalachicola-Chattahoochee-Flint Waterway

And then the Apalachicola, the Chattahoochee, and the Flint Waterway which is known sometimes as the Three River Waterway or the Tri-State Waterway development, and there are requests in regard to this. At present, this waterway is open and is navigable about 90 percent of the year, but it should be navigable 100 percent of the year and this is very important to the people of Georgia, Alabama, and Florida.

At one time there was some opposition, but that opposition has now disappeared substantially for all practical purposes, and I hope this waterway can go forward and be developed.

I ask that all of these statements appear in the record in full. Alabama has a number of waterways. It reminds me of a story that I heard of a fellow who is about 93 years of age and he had had five wives. He had outlived all of them. They died and he buried them all in the Antioch Baptist Church graveyard in Alabama. Every county has an Antioch Baptist Church and Pleasant Grove Methodist Church. So he had arranged each of his wives, about the grave where they would be. When he was fixing to pass away, he was on his death bed and he was asking them to sort of put him in the center with all of his five wives.

One of the brethern was talking to him and was saying, "Well, we're going to put you where you will be just even distance from all of them," and he whispered and said, "That's all right and that's nice," but he says, "tilt me toward Tillie." [Laughter.]

Well, I believe we have been a little bit tilted toward the Tennennee-Tombigbee in the past, but all of these waterways are very important and most important to our State. We would appreciate it if you would take careful consideration of this request. We consider the two Senators from Mississippi are the third and fourth Senators from Alabama. We want you to be our guardians and take care of us on this committee.

Thank you very much.

Senator COCHRAN. Thank you very much, Senator. Your statements will be included in the record in full. We appreciate that very much. We appreciate you being here and counsel and advice you provided and your strong support of these important projects, particularly the Tennessee-Tombigbee Waterway project.

Senator HEFLIN. Before I leave, I would like to ask Mr. Rushton, who is executive director, assistant to Governor Wallace, to come forward and there may be some more planning to testify on these.

[The statements follow:]

STATEMENT OF SENATOR HOWELL T. HEFLIN

ALABAMA WATERWAY PROJECTS

Mr. Chairman, as you and the other members of this committee know, I have a deep and abiding interest in the development of the water resources of Alabama and our Nation. I appreciate the opportunity to appear before you today and to join with other members of the Alabama congressional delegation as well as with spokesmen from several Alabama River development associations in support of funds for the continued and orderly development of the water resources of Alabama.

Because of your crowded agenda, my remarks will be brief. It would, I feel, be much more beneficial to this committee to receive the views and comments of those here today who have traveled great distances to present their cases to you in behalf of their respective waterway systems. Those who are here today are dedicated to the principle that the citizens of Alabama will realize and benefit from the vast potential of Alabama's rivers and streams. I warmly commend their testimonies to you.

Mr. Chairman, water is Alabama's richest and most abundant natural asset. Many, if not most, of the projects for which we are seeking funds will serve several purposes at once; namely, more and better economic opportunities, more and better public health and safety, more and better recreational opportunities, more jobs and a better standard of living. Indeed, the overall quality of life in our State and elsewhere will be enhanced if we fund these projects and bring them to complete fruition.

We are most grateful to this committee for its interest in the full development of the water resources of Alabama. With your continued help, these developments will return rich dividends to our citizens and will confirm the faith and high expectations of this committee.

APALACHICOLA-CHATTAHOOCHEE-FLINT WATERWAY

Mr. Chairman, I have testified in years past in behalf of funds for the tri-rivers system. In my previous testimonies, I have endeavored to stress upon the committee the severe navigation problems which exist on the system, particularly during periods of low river flow. There is no doubt that this splendid river basin is ideal for economic growth, but commercial users of the waterway must have the assurance of navigation on a year-round basis. The main obstacles to navigation, the rock protrusions, have been removed and the Army Corps of Engineers has determined that the required 9-foot depth will be maintained 90 percent of the year.

The President's budget for the 1984 fiscal year calls for $4,060,000 in operation and maintenance funds for the tri-rivers system. Spokesmen for the Tri-rivers Waterway Development Association will also testify before this committee today in behalf of these funds. They will also request the committee to approve $250,000 for survey studies carried out by a three-State committee. Other funding for the operation and maintenance of lock and dam projects along the Apalachicola-Chattahoochee-Flint Waterway totaling $15,606,000 is also requested.

Mr. Chairman, navigation on the tri-rivers system on a 12-month basis is a must for the citizens of the river basin to be able to take their place in the economic growth of the Southeast and our Nation. I urge the committee to approve both the budget request for operation and maintenance funds and the request for continued survey moneys needed to begin the quest toward maintaining the congressionally authorized navigation channel.

COOSA-ALABAMA RIVER SYSTEM

I strongly urge approval of moneys contained in the budget for the coming fiscal year for various projects associated with the Coosa-Alabama River system.

The budget requests operation and maintenance funds in the amount of $16,690,000 for five major projects along the Coosa-Alabama Waterway. These facilities and reaches on the river system must be maintained so that powerplant output and navigation will operate at peak efficiency.

I might add that the Coosa-Alabama Improvement Association will seek to increase funding for the Alabama-Coosa River project. Their testimony will set forth the basis and justification for their request of $9.6 million.

Mr. Chairman, navigation of the Alabama River from Mobile to Montgomery—a distance of 345 miles—became a reality over a decade ago. We had hoped to be in a position this year to push for funds to extend navigation on the upstream portion of the Coosa-Alabama River system. I reluctantly conclude for the interim that the timing is not right for a new construction start such as the Coosa. However, I have not given up by any means. The regional benefits of the project are firmly established. Extending the navigation channel to Gadsden and Rome, Ga., is an excellent investment opportunity which can provide a significant and enduring stimulus to the economy. I ask that the members of the committee keep the Coosa project high on the list of priorities when our overall economy improves. I also urge approval of the budget request of $250,000 to continue with the survey study of the Alabama River below Claiborne L&D. The objective of this study is to determine the needed improvements necessary to enhance the availability of the channel in the future.

In 1982, the President signed into law a bill to rename the Jones Bluff lock and dam on the Alabama River in honor of the late Dr. Robert F. Henry, who was the guiding force behind the development of the Coosa-Alabama River system for a quarter of a century. I attended formal ceremonies naming the Jones Bluff in honor of Dr. Henry. It was his dream and that of other far-sighted men to make the entire river system navigable. I shall continue to do all in my power to make Dr. Henry's dream a reality.

WARRIOR-TOMBIGBEE WATERWAY AND MOBILE HARBOR

The President's budget for the 1985 fiscal year calls for $12,853,000 in operation and maintenance funds for the Warrior-Tombigbee River system. This figure, I believe, includes $3.5 million for the initiation of a program to improve channel efficiency, thus reducing regular funding for operation and maintenance. I might add that the Warrior-Tombigbee Development Association will seek to increase funding by some $2.5 or $3 million to recover this reduction in traditional operation and maintenance.

Mr. Chairman, witnesses from the association will also request the approval of additional funds to permit the continued planning and engineering effort directed toward the feasibility of replacing the lock at the Oliver lock and dam on the Warrior River near Tuscaloosa. The Oliver replacement has now been favorably reported by the Board of Engineers for Rivers and Harbors, and its authorization is pending. I endorse their request of $2,850,000.

Ironically, the William Bacon Oliver lock and dam was the first structure constructed under the current modernization program which contemplated the construction of 5 new locks and dams to replace the original system of 17 dams and 18 locks with the exception of the uppermost structure in the system: namely, the John Hollis Bankhead lock and dam. Time and progress, however, have made the Oliver obsolete as evidenced by the chronic barge congestion at the lock whose dimensions are only 95 feet by 460 feet. A new lock with dimensions of 110 feet by 600 feet is badly needed if traffic on this busy river system is to continue unimpeded.

The proposed budget for fiscal year 1985 requests $4,578,000 for operation and maintenance funds for the Port of Mobile. Witnesses present today will request additional funding for this project. Their testimony will provide the justification for the approval of these additional moneys for Mobile Harbor. The Port of Mobile is Alabama's only seaport and is one of the Nation's great natural harbors. The Port of Mobile is strategically located and for many years has ranked among the top 10 ports in the United States. There is also in the budget a request for $1 million in survey money for Mobile Harbor. These funds will be used to continue planning and engineering activities for modification and improvement of Mobile Harbor.

TENNESSEE-TOMBIGBEE WATERWAY

Mr. Chairman, I continue to stand firm in my conviction that no project holds so much promise for the people of Alabama and our Nation as does the Tennessee-Tombigbee Waterway. And because I feel so strongly about the vital importance of this project to our citizens, I have been proud to stand shoulder to shoulder with other supporters of the waterway in the fight to make the project a reality.

You will receive detailed testimony today to the effect that the entire project is now more than 85 percent completed with the navigational features, alone, about 93 percent completed. We are now only 1 year away from opening the entire project to navigation. In June of next year, the Tennessee-Tombigbee Waterway will connect 16,000 miles of inland water in 23 States. This system will be an important lane of commerce for the Nation providing significant savings in transportation costs.

Mr. Chairman, I commend the budget request of $11,063,000 for the operation and maintenance of the Tennessee-Tombigbee Waterway. In addition to the request for operation and maintenance funds, the budget also contains other requests associated with the project, including $112,000 to continue the Tennessee-Tombigbee corridor study.

This study covers 51 counties, 18 of which are in Alabama. It is designed to assist these counties in capitalizing on the economic potential of the Tennessee-Tombigbee Waterway when the project is completed. With the drastic cutbacks in other Federal planning programs, this study is the only source of technical assistance being made available to some of these counties. It is essential that sufficient funds be maintained for this study to keep collected data current and accessible for individual county planning. In view of the benefits awaiting our citizens as a result of the development of the Tennessee-Tombigbee Waterway, I feel that it is sound economic policy to provide them with the know-how necessary to take advantage of the project.

I urge the committee to approve the budget request for these items.

Thank you.

TENNESSEE-TOMBIGBEE WATERWAY

STATEMENTS OF:

GLOVER WILKINS, ADMINISTRATOR, TENNESSEE-TOMBIGBEE WATER DEVELOPMENT AUTHORITY

FULLER KIMBEL, VICE CHAIRMAN

BILL RUSHTON, REPRESENTING GOV. GEORGE WALLACE OF ALABAMA

Senator COCHRAN. We appreciate you being here, and we will be hearing from each of those witnesses in due course. Our list of witnesses calls for Mr. Glover Wilkins, administrator of the Tennessee-Tombigbee Water Development Authority, and Mr. Fuller Kimbel, vice chairman, to be our next witnesses. We invite you, Glover and Mr. Kimbel, to come forward with your colleagues and associates.

We have a copy of your prepared statement, and I appreciate very much having the honor of presiding over this hearing, particularly since it may be, I don't know that it will be, but it may be your final appearance before the comminttee in your capacity as administrator. I hope this won't be the end of your communications and your advice and help for those of us who serve here in the Congress as we go about trying to make decisions about how to appropriate funds for various important projects down in Mississippi and in Alabama because we have always considered you to be a very close friend and an important constitutent. We know you are nearing the time when you claim to be retiring. I don't know if that is really going to come true or whether we are going to let you or not. You have given great leadership in your capacity as administrator. I am honored to be here today to preside over this hearing.

Senator Stennis, do you have any opening comments you would like to make at this point?

TRIBUTE TO GLOVER WILKINS

Senator STENNIS. I will just add this as I know time is short and Mr. Wilkins is going to speak. I think, gentlemen, the compact between these States that went together with the permission of the Congress and formed, they allied themselves on the side of the Tennessee-Tombigbee and went to work, and consistently supported through their legislatures, their Governors. One of the main contributions they made was to find Glover Wilkins and put him to work, given him a chance, and he rendered a very fine service. I am familiar with it, all the years that he served. We are most grateful to him. We wish him well in the future. We are going to be seeing more of him. Support for money, money got kind of scarce here for the Tenn-Tom, scarce for a lot of purposes. We were very fortunate to get the main appropriations and I think we ought to show our gratitude, for instance, not only from the States where the Tombigbee River touches, but it affects at least half the States in the Union more or less.

I am confident it will find its place in the great waterways of the Nation, a tribute to Mr. Glover and his work and also to the U.S. Army Corps of Engineers. They conceived the thing and put it on paper and then carried it out all working together. I am happy to pay this tribute to them.

Thank you very much.

Senator COCHRAN. Thank you, Senator.

Mr. Wilkins, please proceed.

Mr. WILKINS. Thank you, Mr. Chairman

Bill Rushton is representing the chairman of the Tennessee-Tombigbee Waterway Authority, Governor Wallace, and our vice chairman, Mr. Fuller Kimbel, and then the assistant administrator and kind of our right arm and coworker over the past 20 years, Mrs. Darlene Scoggins.

Mr. Chairman, I do appreciate more than you ever know the generous and kind remarks you and Senator Stennis have made about not only me but the Tenn-Tom Authority. I think Mississippi is most fortunate when 3 years ago I used to come here and years before that I would appear before Senator Stennis and then when we walked in here 3 years ago and saw you sitting in that chair, it was a very comforting feeling and we really appreciate that. I think Mississippi is indeed fortunate.

This is my last appearance as the administrator, however, the torch will be passed to I think the very fine, capable, and effective and efficient person Don Waldon, who is the deputy administrator. He will be the administrator in the future.

I have a statement which I would like to present for the record, it is very short, but in the interest of time, I will not read it. However, it does show that we are chasing from a group situation funds to build the waterway. Thanks to you, we have it, and we do appreciate the efforts of this committee and its very fine staff. I think that it is most unusual that you have such a fine staff as you have in this committee here. But we are changing our direction; now we will be a development agency seeing that the waterway is used. One of the things that this committee has provided was the funds for the corridor study which was conducted by the Corps of Engineers, and this will be a very effective tool for us to use in the future. We urge this continued funding.

Also, I am very happy to report there are some 13 different waterfront sites now planned or under construction along the waterway. The others are planned in Tennessee, western Kentucky, and so forth.

We are very happy also, and as expected, commodities are already being moved on the waterway that weren't anticipated by us or the Corps of Engineers, such as gypsum.

We think particularly the States of Alabama and Mississippi are blessed with forests, and with the tremendous trade deficit that this country is having, if we can start increasing exports through the use of the Tennessee-Tombigbee, there are many benefits to come not only to our region but also to this Nation.

Mr. Chairman, in the interest of time, I would like to close out my statement by, again, saying indeed how grateful we are for the support of this committee, and we really appreciate it. Thank you, sir.

[The statement follows:]

STATEMENT OF GLOVER WILKINS, ADMINISTRATOR, TENNESSEE-TOMBIGBEE WATERWAY DEVELOPMENT AUTHORITY

Mr. Chairman, I am Glover Wilkins, administrator of the Tennessee-Tombigbee Waterway Development Authority.

On behalf of the authority, I greatly appreciate the opportunity to once again appear before this distinguished committee.

I believe this is my 25th appearance before this subcommittee and will be my last, since I am retiring in July. Throughout these years, this committee has always been attentive and supportive of the authority and the many other groups that have come to you in support of the Tenn-Tom. You and your capable staff are to be commended for the stewardship you have provided for the development of the Nation's water resources. We, from the grassroots, are fully aware that this chore has been a difficult one during recent years and we all appreciate what you have done in the face of these obstacles.

The Corps of Engineers has already informed you of the excellent pace Tenn-Tom is now proceeding toward completion. The recent news that the waterway will be completed in June 1985 has generated even greater interest in developing the commercial navigational potential of this national transportation artery.

I am very pleased to report to you that the affected States, counties, as well as private interests are hurriedly making plans for Tenn-Tom's completion. For example, some 13 ports or waterfront sites are now planned or under construction along the waterway, itself. In addition, other facilities are underway along the Tennessee River in north Alabama, Tennessee, and western Kentucky in anticipation of Tenn-Tom.

The best example of the broad geographic interest in Tenn-Tom was the large turnout for the authority-sponsored Tenn-Tom Development Opportunities Conference held in Mobile last November. Over 650 people from 25 States attended. We had anticipated about 250 attendees.

So far, about 350,000 tons of commerce have already moved on the completed portion of Tenn-Tom. As expected, there are commodities already being transported on the waterway that were not anticipated by the Corps or the authority. For examples: Gypsum, originating in Spain, has been transported on Tenn-Tom to a cement plant in east Mississippi; and, wood chips from a new plant located on the waterway in west Alabama are being exported to Scandanavia.

The low-cost transportation provided by Tenn-Tom will help increase the markets for many of the waterway region's resources and products such as coal and agricultural and forestry products.

The southern region produces much of the Nation's timber resources. Mississippi has more standing timber resources than any other State in the South. However, this region presently exports only 3 to 4 percent of its forestry products compared to a national average of about 8 percent.

In Alabama alone, about 67,000 people are employed in forestry-related jobs with exports accounting for about 10 percent of these jobs. About 7,000 new jobs would be created in that State, alone, if forestry exports could be doubled or increased to the national average when Tenn-Tom is completed.

The authority will sponsor a seminar next month to help acquaint forestry producers with the export potential of its products as a result of the completion of Tenn-Tom.

We are also working closely with the Appalachian Regional Commission and the affected States on the market potential of exporting coal as well as agricultural and forestry products from the Tenn-Tom region. These efforts also include exploring the feasibility of establishing export trading companies to help improve competitiveness of the small producers in this region.

This subcommittee has greatly assisted the orderly development of Tenn-Tom by funding the Tenn-Tom corridor study. This comprehensive study, covering 51 counties in 4 States, is now nearing completion. The extensive socioeconomic, environmental, and other demographic data compiled during the course of this study will be invaluable to these counties in their plans to utilize the waterway.

The Corps just recently completed a series of local meetings with elected officials to demonstrate the capabilities of the corridor study as a planning tool. I have with me several letters we received from officials within the corridor expressing their support for this study. I request that these letters be submitted as part of the record of this hearing.

I further request that you continue to fund the corridor study at a sufficient level that will insure its timely completion and proper dissemination of its data and information to those officials within the corridor.

The authority further recommends approval of the President's budget request for those funds needed to operate and maintain the waterway.

Thank you again for the honor and privilege of appearing before you today.

LETTER FROM GUTHRIE J. SMITH, MAYOR, FAYETTE, ALA.

FEBRUARY 23, 1984.

DONALD G. WALDON,
Deputy Administrator,
Tennessee-Tombigbee Waterway Development Authority,
Columbus, Miss.

DEAR DON: I had the opportunity to attend the recent briefing by the Corps of Engineers on the Tenn-Tom corridor study in Tuscaloosa.

As you know, Fayette County is one of the 51 counties included in the study. I was very impressed by the amount of data and information available from the study for my county.

The corridor study will be of great benefit to my county in preparing for the impact of the Tenn-Tom Waterway and other economic development opportunities. However, it will be most important that the information be kept current and that the data be readily accessible to the affected counties. Therefore, I recommend that the study include funds to permit the counties easy access to the data and to allow the information to be maintained on a current basis.

I look forward to participating in the more detailed training sessions planned for the study this summer.

Sincerely,

GUTHRIE J. SMITH,
Mayor.

LETTER FROM HUGH ALLEN, MAYOR, DEMOPOLIS, ALA.

FEBRUARY 10, 1984.

Mr. DON WALDON,
Columbus, Miss.

DEAR DON: The Tenn-Tom corridor study, being done by the Corps of Engineers, is nearing completion. As you are aware, this study will provide much needed information for the people along the corridor. This information will be especially useful to the local units of government and regional planning agencies.

The Corps of Engineers will make a request for funding to provide equipment that will make this information available to the users. I endorse this effort by the Corps of Engineers and feel that without the necessary funding to provide this data to the users, much of the study will be unavailable for use.

Sincerely,

HUGH ALLEN,
Mayor.

LETTER FROM WILLIAM M. BRANCH, PROBATE JUDGE, GREENE COUNTY, ALA.

MARCH 1, 1984.

Mr. GLOVER WILKINS,
Administrator,
Tennessee-Tombigbee Waterway Development Authority,
Columbus, Miss.

DEAR MR. WILKINS: I am writing to urge you and others of influence in the matter to secure the continuation and completion of the Tennessee-Tombigbee Waterway corridor study.

Greene County has more than $12 million invested in a port and industrial park complex. We need all of the tools and knowledge the study will provide. Our local communities can also benefit from comprehensive distribution of the study's products including the proposed computer terminal placement to enable local governments and community development organizations to access and utilize the computer-aided planning systems devised by the corridor study.

I must also take this opportunity to suggest that additional resources should be identified to aid local governments that serve predominately minority and disadvantaged populations in utilizing the corridor study. Our development needs are unique and present special problems relating to infrastructure and other prerequisites for development. The corridor study can help us to overcome these additional challenges and help us to be competitive with communities with more abundant resources.

Please do all you can to implement the fullest capabilities of the Tennessee-Tombigbee Waterway corridor study to serve our people.

Sincerely yours,

WILLIAM M. BRANCH,
Probate Judge.

LETTER FROM JOE VITERISI, MAYOR, PADUCAH, KY.

MARCH 5, 1984.

Mr. DON WALDON,
Tennessee-Tombigbee Waterway Development Authority,
Columbus, Miss.

DEAR MR. WALDON: As mayor of the city of Paducah, I would like to express to the authority our community's appreciation for the fine work that has led to next year's scheduled completion of the Tenn-Tom Waterway. The city of Paducah will certainly benefit from this new waterway system due to our location at the confluence of the Tennessee and Ohio River system.

In an effort to better prepare ourselves for the opening of this new waterway, we are looking forward to the availability of the economic impact assessment model and the integrated data analysis system. These tools will be invaluable to our community for making local planning decisions and for use in industrial recruitment. A demonstration of these programs was provided by the Corps of Engineers in Paducah last November. Please let me know when we can expect to have access to this information.

If I can be of any assistance to the authority, please let me know.

Sincerely,

JOE VITERISI,
Mayor.

LETTER FROM WILLIAM J. COLBURN, MAYOR, CALVERT CITY, KY.

MARCH 1, 1984.

Mr. DON WALDON,
Tennessee-Tombigbee Waterway Development Authority,
Columbus, Miss.

DEAR DON: As the mayor of Calvert City, Ky., I would like to express my continued support for the Tennessee-Tombigbee Waterway. As you know, Calvert City is strategically located on the Tennessee River approximately 12 miles from its confluence with the Ohio River. We have a large industrial base which makes substantial use of the waterway system. Calvert City is also involved with the Corps of Engineers in studying the feasibility of a riverport to serve our industrial, agricultural, and commercial needs. We are looking forward to next year's completion of the Tenn-Tom Waterway and are making necessary preparations for its opening.

I would also like to voice my interest in the computer products of the corridor study. I have seen some of the capabilities of these systems to provide needed economic data and am eager to make use of this information in attracting industrial clients and in assisting in the decisionmaking process at the local level.

We would like to thank the waterway authority for their fine efforts and look forward to working with you in the development of the Tenn-Tom corridor.

Sincerely,

WILLIAM COLBURN,
Mayor.

LETTER FROM JAMES EVERETT, CHAIRMAN, BOARD OF DIRECTORS, PURCHASE AREA DEVELOPMENT DISTRICT, KENTUCKY

MARCH 1, 1984.

Mr. DON WALDON,
Tennessee-Tombigbee Waterway Development Authority,
Columbus, Miss.

DEAR DON: As chairman of the board of directors of the Purchase Area Development District, I would like to voice our continued support for the Tennessee-Tombigbee Waterway. As the completion of the waterway draws near, we are seeing increased activities at our riverports and barge companies. Naturally, our industrial recruitment specialist, chambers of commerce, and others are using the waterway as a strong drawing card for this area. We are also quite interested in the economic impact assessment model which was demonstrated in Paducah and Murray several months ago. Hopefully, this program will soon be available to assist in this region's economic development activities.

We sincerely appreciate the authority's efforts in seeing to the completion of the waterway. You have provided us with a new opportunity for economic growth and we will work diligently to assure that this opportunity is not wasted.

Sincerely,

JAMES EVERETT.

LETTER FROM GEORGE H. WEAKS, CALLOWAY COUNTY (KY.) JUDGE/EXECUTIVE

FEBRUARY 29, 1984.

Mr. DON WALDON,
Tennessee-Tombigbee Waterway Development Authority,
Columbus, Miss.

DEAR MR. WALDON: I would like to take this time to congratulate the authority on the outstanding job they have done on guiding the Tennessee-Tombigbee Waterway to its scheduled completion next year. For the residents of Calloway County, this waterway should further serve to enhance the economic benefits available to them. We are also looking forward to the availability of the corridor study products such as the economic impact assessment model and the integrated data analysis system. We feel that these tools will be invaluable in our efforts to recruit additional industry to our area.

You have my county's continued support in the development of the waterway and the corridor study. Please let me know if I can be of any assistance.

Sincerely,

GEORGE WEAKS.

LETTER FROM THOMAS GRIFFITH, MAYOR, AMORY, MISS.

FEBRUARY 27, 1984.

Mr. DON WALDON,
Deputy Administrator,
Tennessee-Tombigbee Waterway Development Authority,
Columbus, Miss.

DEAR DON: I want to express my feelings of support for the recently completed Tennessee-Tombigbee corridor study. This is a good piece of work and can be helpful as time goes on to industrial companies wanting to locate in this area.

I do think that it is extremely important to be sure that changes are made and incorporated in the book as conditions change with the completion of the waterway. Many areas that are in flood zones will be changed as the waterway is built and the spoil is used to fill low areas. I am sure there are other changes that will take place but something must be done to insure that the information is up to date.

Again, it is an impressive piece of work and I am sure will be helpful.

Sincerely,

THOMAS GRIFFITH,
Mayor.

LETTER FROM WILLIAM C. KIRK, MAYOR, LINDEN, TENN.

MARCH 2, 1984.

Mr. GLOVER WILKINS,
Executive Director,
Tennessee-Tombigbee Waterway Authority,
Columbus, Miss.

DEAR MR. WILKINS: As mayor of Linden, Tenn., which is in Perry County on the Tennessee River, I would like to take this opportunity to state my continued support for the Tenn-Tom project.

I am also familiar with the planning process that has been ongoing through the Corps of Engineers' corridor study. I believe this study will help local governments take fuller advantage of the assets inherent in the Tenn-Tom project.

Further, I thoroughly enjoyed your economic development conference in Mobile last year and would hope you could continue this educational experience. We work with the South Central Tennessee Development District quite closely in our economic and community development and hope that you can keep your relationship strong with the districts.

If I may be of any assistance, please let me know.

Very truly yours,

WILLIAM C. KIRK,
Mayor.

LETTER FROM DONNIE H. QUALLS, PERRY COUNTY EXECUTIVE, LINDEN, TENN.

MARCH 2, 1984.

Mr. GLOVER WILKINS,
Executive Director,
Tennessee-Tombigbee Waterway Authority,
Columbus, Miss.

DEAR MR. WILKINS: As county executive of Perry County, Tenn., I would like to voice my support for the Tenn-Tom project for the Corps of Engineers' corridor study. I hope that this corridor study will enable local officials, such as myself, to more fully take advantage of the great potential of the Tennessee-Tombigbee Waterway.

In the rural areas to be served by this project, we drastically need job-creating opportunities for our citizens in such a way that we might enjoy orderly, yet sustained, development. I would encourage the water authority to lobby Congress for sources of assistance in industrial location, infrastructure development, capital financing methods, and human and natural resources development which will help our communities capitalize on this much-needed project.

Further, we work very closely with the South Central Tennessee Development District, and I would encourage your continued suport of the development districts.

If I may be of any assistance, please let me know.

Very truly yours,

DONNIE H. QUALLS,
County Executive.

LETTER FROM JAMES R. PATTERSON, HARDIN COUNTY EXECUTIVE, SAVANNAH, TENN.

FEBRUARY 22, 1984.

Mr. DON WALDON,
Tennessee-Tombigbee Development Waterway,
Columbus, Miss.

DEAR MR. WALDON: As an elected official in Hardin County, Tenn., I am looking forward to the completion of the Tennessee-Tombigbee Waterway as this project should have long-range benefits to our county and the surrounding region. Hardin County's location just north of the juncture of the Tenn-Tom and the Tennessee River should place us in an ideal position for future economic development and mean more jobs for our people.

I have followed the progress of the Tenn-Tom corridor study and appreciate the excellent work of the Corps of Engineers in compiling the population and economic data necessary for use in planning for growth and needed community services. I am particularly interested in the computer models developed for the study and recently attended a training session conducted by the Corps on the use of the model.

As I understand, the Corps is trying to arrange for computer terminals to be placed in a number of locations along the corridor so that data will be readily accessible for use by local officials and development agencies in their planning efforts. I fully support this since it will aid us at the local level in our decisionmaking regarding population growth and the need for services such as water, sewer, and recreation.

I appreciate the efforts of the Tenn-Tom Authority in following the progress of construction on the waterway and look forward to working with you in the future.

Sincerely,

JAMES R. PATTERSON,
County Executive.

LETTER FROM ANN G. HOUSTON, COUNTY EXECUTIVE, DECATUR COUNTY, TENN.

FEBRUARY 21, 1984.

Mr. DON WALDON,
Tennessee-Tombigbee Waterway,
Columbus, Miss.

DEAR MR. WALDON: First, let me say that we in Decatur County appreciate the efforts of the Tennessee-Tombigbee Authority in promoting the development of the Tenn-Tom Waterway. Our county is a member of a local riverport authority and we are looking with great expectation to the opening of the waterway and its anticipated economic benefits to the people of this area.

I have kept abreast of the progress of the Tenn-Tom corridor study and now understand from the Corps of Engineers that various types of economic and population data are available for use by local officials in their community planning efforts. If this data could be obtainable using computer terminals situated at the local level, it would surely be an aid. We support this concept and hope that the Corps carries it out.

Thanks again for your assistance in the past and we look forward to working with you in the future.

Sincerely,

ANN G. HOUSTON,
County Executive.

WATERWAY DEVELOPMENT OPPORTUNITIES

Senator COCHRAN. Thank you, Glover.

Are there any other statements of your group for the committee?

Mr. RUSHTON. Sir, I would like to echo what Senator Stennis said about Mr. Glover Wilkins. Of course, our Governor has been deeply involved in the Tenn-Tom. He has just started his fourth term as chairman of the Tennessee-Tom. It behooves us to get our people ready for the impact that is going to be brought upon the State of Mississippi, particularly Mississippi and the State of Alabama. I know in the month of December last year, year before last, the State of Alabama made a $30 million bond issue to build four docking facilities and industrial facilities on the Tennessee-Tombigbee. I think we have our work cut out for us of educating our people the momentum, the impact this waterway is going to have upon our territory.

I think that is where we need to go to work now.

We certainly appreciate this committee and what it has done for getting the Tennessee-Tom completed, Mr. Chairman.

Senator Cochran. Thank you very much for your statement. I think one of the highlights of the statement Glover Wilkins submitted today is found on page 2 of his statement where he talks about the fact the authority is going to sponsor a seminar this next month to acquaint landowners and others in the region about the benefits that could be derived from forestry exports, forest products exports. We have a tremendous opportunity in the Southeastern United States to increase our economic well-being by better utilization of our forestry resources and this waterway is going to result in tremendous new opportunities and to be able to work with the Appalachian Regional Commission, talk about export potential, forestry resources and products, for coal that comes from the region, I think is going to illustrate to everyone how important it was for this project to be completed and to be completed ahead of schedule.

It is really reassuring to look at the figures and show, for navigation purposes, the project is 94-percent completed and that all of the funds necessary for completion of construction have been obligated and that we still have an opportunity, even if there is a shortage in that, for an additional $22 million to come from unobligated funds. So we are well on the way to seeing this project completed and it is a delight for me to be here today and share with you this opportunity to hear Glover Wilkins tell about what the benefits are going to be with the construction and now the end of construction now in sight.

I don't know about us all getting on that boat, it might sink. There are so many people who had a part in this thing and there are just hundreds of people all over Mississippi and Alabama and throughout the country who helped make the completion of this project a reality. It will certainly be a great day to celebrate and I look forward to it as I know all of you do.

Senator Stennis, do you have any questions or comments?

Senator Stennis. Mr. Chairman, I think you have spoken my sentiments, too. We want to express our gratitude always to our colleagues and to the taxpayers of the Nation for what has been done. This waterway doesn't belong to us but it is certainly up to us to see that it is put over and goes on and serves all the people. I am sure we are looking in that direction. With you, I am delighted to be here for this little celebration in a way. I think you have already shown to our people already service beyond what many of them were expecting. I know one gentleman who has a barge load of corn from southern Illinois, brought it down to Mississippi, New Orleans, turned their eastward to Mobile and up the Tombigbee to within a few miles of the Mississippi/Alabama line, navigable that far, and unloaded there, and I understand he saved $1,300 in freight charges—saved that much.

Now when you get the water flowing straight through, you will save maybe twice that much in time and distance traveled because he came straight south down the Tennessee and the Tombigbee. That is your proof of the pudding, that corn was brought in there to feed a vast farm of hogs. Very successful in Knoxford County, Miss. That is my first report. I will be giving more reports later.

Senator COCHRAN. Thank you very much. We appreciate your being. here.

STATEMENT OF LARRY OTIS, EXECUTIVE DIRECTOR, TOMBIGBEE RIVER VALLEY WATER MANAGEMENT DISTRICT

Senator COCHRAN. Our next witness is Mr. Larry Otis, who is executive director of the Tombigbee River Valley Water Managment District, a local sponsor.

We welcome you again to the committee, Larry. We are always glad to see you. We will put your statement in the record in full.

[The statement follows:]

STATEMENT OF LARRY K. OTIS, EXECUTIVE DIRECTOR, TOMBIGBEE RIVER VALLEY WATER MANAGEMENT DISTRICT

The Tombigbee River Valley Water Management District appreciates the opportunity to appear before this committee. Since August 23, 1963, the district has served as local sponsor to the Corps of Engineers for the Tennessee-Tombigbee Waterway. That sponsorship has involved over $150 million in relocated bridges, closed roads, relocated routes, and public facilities. With 14 months until the Tennessee-Tombigbee Waterway is completed, we are seeing a change. Only two relocation activities remain to be accomplished; both are sewer projects at Fulton and Smithville.

The change we are observing in Mississippi is a positive movement toward the development opportunity that the Tennessee-Tombigbee Waterway makes possible. Locally, private investors are studying and reviewing investment opportunities that are evolving. These entrepreneurs are actively engaged in developing new business opportunities such as water-related enterprises; manufacturing facilities for houseboats, management companies for ports, grain elevators, private ports for fertilizers, wood products, stone, evaluating the potential for export trading companies for timber and other commodities. We are working with three industries at one site. Area businessmen are also becoming involved in recreational business opportunities with marinas, second or recreational homes, development of adjacent real estate to areas along the waterway in Mississippi.

The other area of development that will have a long-range impact is in planning and coordination of major industrial sites. A recent study has been completed that identifies the major sites that have been evaluated from a site selection view of availability to highway, rail, air, acreage in blocks, elevation of site above normal pool, utilities, and other factors. The study now moves to the point of acquiring acquisition costs and development costs. This will enable the State to review the best method of holding these sites for future development.

Many existing Mississippi firms are becoming aware of the waterborne freight rates and with this information are exploring the potential markets and opportunities in export in mid-America.

Northeast Mississippi's greatest export potential is in the agricultural production area. The leading commodities are forest products such as chips, logs, timber, and finished wood products; grain products, soybeans, and wheat. The recent development of establishment of an agri-business research park adjacent to Mississippi State University will have a long-term impact on this field in the next 25 to 30 years. This research park will contain 215 acres just north of Mississippi State University.

We believe that if we can overcome problems of marketing of commodities, developing value-added industry, and generation of capital, Mississippi can receive benefits from the Tennessee-Tombigbee Waterway that can have great growth potentials. Although there are areas of concern, they are not impossible to acquire and develop. It is this area of concern that will allow local free enterprise to exercise its leadership. The Tennessee-Tombigbee Waterway will provide a laboratory of opportunities and experiences for the private investor.

We in Mississippi look forward to learning from development strategy of other areas and introducing new strategies of our own. We believe that we live in a water surplus area with 5½ billion gallons of water per day passing Columbus, a climate that is conducive to the production of any agricultural commodity, and soils that will grow most any agricultural product. Our future lies in the development of a natural resources technology, a technology that uses our available water, soil, climate, and the greatest people anywhere.

Thank you for your support of this great project of national importance that will open up middle America to the world. Through shorter routes, saving days of travel, and more competitive opportunities, Mississippi is looking to be on the waterway as a user, developer, and winner in the future. As the Tombigbee River Valley Water Management District looks to the future, it must concentrate on being sure that the infrastructure of water resources is developed to provide water necessary for this coming development. Our board of directors is dedicated to the completion and maximum use of the Tennessee-Tombigbee Waterway.

Mr. Otis. I would like to make brief comments in letting you know the district served its local sponsorship role since 1963. We accomplished all but two of the non-Federal relocations to this time and they will be completed prior to the putting of water in the pool at the Fulton Pool.

There is a change taking place in Mississippi. I think you need to know what is occurring. We are seeing an improved look at the waterway by local entrepreneurs, private investors, as they review opportunities that they have to become involved in industry. We are seeing daily calls coming in that industries are looking to locate on the waterway. In fact, we are dealing with it with three industries at one site that will be building a private pool of their own, and we are seeing a variety of products that we didn't expect, as Glover has said. These things are coming rapidly, and this is something I think we are pleased in Mississippi to see this take place.

Also, there is a large study just been completed locating large industrial tracts and we hope we will have developmental costs and acquisition costs of those sites, some of those being as large as 3,000 acres along the waterway. This will give some tremendous opportunities for the State then to get the real benefits from this project as it goes along.

As you mentioned a while ago about the forestry products, not only just in forestry are we very fortunate, but we are right in the middle of an agricultural area and past Columbus every day into Alabama 5.5 million gallons of water, a water surplus area; sometimes we want to get some of that water, we are in a water surplus area which leads us to the idea we can develop and have a natural resources technology area, and we can put together the necessary agricultural production that is necessary with the climate, the soil, and all the other conditions that we have.

We want to thank you and the committee for the support you have given this project through the years and we want you to know Mississippi is preparing not only to be a user and a developer, but to be a winner of the use of the waterway in the future and the Tombigbee Water Management District in its role as the sponsor as the actual construction winds down and moves into the infrastructure necessary to provide the water to these industries that is necessary.

Our board of directors is committed toward the maximization of the waterway for the State of Mississippi. If there are any questions, I will be glad to answer.

Senator COCHRAN. We appreciate your being here and telling us about the activities. I know your board is committed to doing everything possible to take maximum advantage of the completion of the Tennessee-Tombigbee Waterway and I commend you for that and for the guidance you are providing to landowners and others who need that assistance to be able to ensure the investment opportunities, the reasonably priced transportation that is available is used to its maximum potential. I think you have made a great contribution to this point and I know your work is going to continue and will be very effective.

We appreciate you being here.

Senator Stennis?

Senator STENNIS. I believe I have nothing further.

PREPARED STATEMENTS FROM MEMBERS OF CONGRESS

Senator COCHRAN. I believe that Congressman Jack Edwards of Alabama and others have submitted prepared statements on the Tenn-Tom project which will be inserted in the record at this point.

[The statements follow:]

STATEMENT OF SHELDON L. MORGAN, MOBILE, ALA.

This statement is rendered in behalf of the Coosa-Alabama River project on which design and engineering work was suspended in 1983. The resumption of that work is important for the continuation of the project toward the ultimate completion of the river basin improvements.

We also would like to request that the committee approve the necessary funds for operation and maintenance of the waterway portion that has already been improved between Mobile and Montgomery. It is our opinion that a decision to develop the Coosa Valley through the proposed improvements of that river basin would be in the best interest of the nation and consistent with the long-standing commitments of the Federal Government dating back to the Eisenhower administration when the Alabama Power Company built the dams on the river.

Thank you for your consideration.

Statement of Representative Jack Edwards of Alabama

TENNESSEE-TOMBIGBEE WATERWAY

Mr. Chairman, I can't tell you how gratified I feel to not have to ask for construction funding for the Tennessee-Tombigbee Waterway. Thanks to your fine work, no additional appropriations are required for construction for this project. I commend your efforts. I would also like to thank Glover Wilkins for his valuable contributions over the years. He will be missed tremendously.

Although no construction funds are needed, it is critical that we continue to provide for adequate maintenance of the waterway. The President's budget has allowed $11.063 million for operation and maintenance in fiscal year 1935. The Corps of Engineers' capability, however, is $15.039 million and I request your approval of that funding level. The waterway must be properly maintained to prepare it for its opening next year and to ensure its maximum efficiency.

The Tennessee-Tombigbee Waterway also represents an important regional development project. The Tennessee-Tombigbee Corridor Study is being conducted to assess the economic impact on and needs of 51 counties in four states. The study will help these counties in planning for future development. Some of these counties are among the very poorest in the country. The study is nearing completion and will make recommendations for the use of water and related land resources, for economic development, for the development of human and minority resources, and for the enhancement of environmental quality. The budget calls for $112.000 for the study and I urge support of that funding level.

Mr. Chairman, I have a very deep personal interest in the mitigation of wildlife losses associated with construction

OF THE TENN-TOM. THIS HAS BEEN A CONTROVERSIAL ISSUE AMONG LANDOWNERS AND ENVIRONMENTALISTS. I HAVE WORKED WITH THOSE INTERESTS TO DEVELOP A COMPROMISE MITIGATION PLAN THAT IS ACCEPTABLE TO BOTH. THAT MITIGATION PLAN HAS BEEN APPROVED BY THE HOUSE PUBLIC WORKS AND TRANSPORTATION COMMITTEE IN ITS OMNIBUS WATER RESOURCES BILL AND HOPEFULLY WILL BE AUTHORIZED BY THE CONGRESS THIS YEAR. I URGE APPROVAL OF $20 MILLION FOR MITIGATION. THERE MAY BE A NEED FOR ADDITIONAL FUNDING WHEN MORE MITIGATION LAND HAS BEEN DESIGNATED.

I WILL BE SUBMITTING SEPARATE TESTIMONY IN STRONG SUPPORT OF APPROPRIATIONS FOR THE ALABAMA-COOSA RIVER SYSTEM, THE BLACK WARRIOR, WARRIOR TOMBIGBEE RIVER SYSTEM, MOBILE HARBOR, THREE MILE CREEK, AND OTHER PROJECTS.

I WOULD AGAIN LIKE TO EXPRESS MY APPRECIATION TO THE CHAIRMAN AND MEMBERS OF THE COMMITTEE FOR THEIR DEDICATION TO THE TENNESSEE-TOMBIGBEE WATERWAY. IT IS A SYSTEM WHICH WILL PROVIDE GREAT TRANSPORTATION BENEFITS FOR OUR PART OF THE NATION. IT IS A PROJECT OF WHICH WE WILL BE EXTREMELY PROUD.

COOSA-ALABAMA WATERWAY

MR. CHAIRMAN I AM HAPPY TO APPEAR BEFORE YOUR COMMITTEE TODAY TO VOICE MY SUPPORT FOR THE FISCAL YEAR 1935 APPROPRIATION REQUEST FOR THE COOSA-ALABAMA RIVER SYSTEM.

IN THE SURVEY AREA, A TOTAL OF $2.75 MILLION IS REQUESTED FOR THREE SEPARATE STUDIES. THE SURVEY OF THE ALABAMA RIVER BELOW CLAIBORNE LOCK AND DAM WILL REQUIRE $250,000 IN 1935; THE DALTON LAKE, GEORGIA, FLOOD CONTROL STUDY, $700,000; AND THE MOBILE HARBOR DEEPENING STUDY, FOR WHICH I WILL TESTIFY SEPARATELY, $1.3 MILLION.

For operation and maintenance along the system, $32.759 million is needed in fiscal year 1985. That funding would be used as follows. Alabama River in Alabama ($9,653,000); Robert F. Henry Lock and Dam ($2,479,000); Millers Ferry Lock and Dam ($3,054,000); Allatoona Lake, Georgia ($4,300,000); and Carters Lake, Georgia, ($2,130,000). The balance, $10.994 million, is needed for operation and maintenance in Mobile Harbor, a subject I will discuss in separate testimony. The Administration has requested lower funding levels for these projects for a total of $24.450 million. I seek your consideration of the full funding level because this river system must be properly maintained so that its optimum economic and navigational benefits will be realized. This work will keep hydro power plants in good condition and will allow dredging and routine maintenance work to continue to provide us with the most energy-efficient means of transportation. If we do not provide adequate funds for dredging, snagging, spoils disposal, repair of public facilities, and other important maintenance work, we will only have more costly repair bills to confront in the future.

I was disappointed when the Corps of Engineers issued a negative report on the Coosa River Navigation Project which would extend the navigation channel from Montgomery to Gadsden. It is regrettable that this project is not feasible at this time, but I am hopeful that the problems facing it will be overcome. At the appropriate time I will continue to work to make the Coosa River Navigation Project a reality.

Mr. Chairman, I appreciate having had this opportunity to outline my request for the Coosa-Alabama River System, and I urge the committee's approval of these funding levels.

MOBILE BAY AREA PROJECTS

Mr. Chairman, it is a pleasure to appear here today to request fiscal year 1985 appropriations for a number of projects of vital concern in the Mobile Bay area.

As you know, the Mobile Harbor Channel Deepening project has been included in the water resources authorization bill pending action in the House. Initial funding has been provided in your fiscal year 1984 supplemental appropriations bill. It is important that we continue to fund the Corps' full capability for continued planning and engineering of the Mobile Harbor Channel Deepening Project. That funding level is $1.3 million as opposed to the President's budget request of $1 million. I urge your approval of the full capability. This work will enable the Corps to proceed at the appropriate speed and will, I believe, allow for a solution that will represent a cost saving in the long run. For operation and maintenance in Mobile Harbor, the President has requested $4.578 million. The Corps' capability is $10.994 million and I request your consideration of that amount.

The flood control project for Three Mile Creek in Mobile has been included in the water resources authorization bill. The project recommendations should meet with the cost-sharing objectives of this administration. I hope the Three Mile Creek flood control project will be eligible for appropriations in fiscal year 1985 and, if so, I trust the committee will fund it at an adequate level. The Corps of Engineers has a $250,000 capability for continued planning and engineering for Three Mile Creek which has been recommended in the President's budget. Mr. Chairman, a great many of my constituents live in constant fear of flooding and a large number of people have worked hard to solve the problem in an expeditious manner. I ask your approval of the budget request for continued planning and engineering so that the project may move forward.

A resolution authorizing a study of the feasibility of deepening Bayou La Batre Channel was approved in 1974 and was first funded in fiscal year 1934. The coastal area of Alabama has experienced a great deal of oil and gas exploration activity in recent years and this increased activity has further pointed to the need for this channel improvement. A $75,000 funding level is needed to continue the Bayou La Batre Channel Deepening Study in fiscal year 1934, and I ask for your full consideration of this study.

Most of our needs in the Mobile area have to do with vital ongoing maintenance activities. Our major industries in the Mobile area, as well as commerce from other areas of the nation, are dependent on an efficient waterway system for the transportation of goods. Commercial and recreational fishermen depend on having access to fishing areas in authorized channels in Mobile Bay and in the Gulf, and they depend on having reliable access to safe harbors. These are just a few of the reasons why maintenance activities are so important. I urge the committee's consideration of the Corps' full operation and maintenance capability on these projects: Bayou Coden, $417.000; Bayou La Batre, $424,000; Gulf Intracoastal Waterway, $9.590 million, Bon Secour River, $435,000; Dog and Fowl Rivers, $466.000; Fly Creek in Baldwin County, $159,000; and Perdido Pass $1.746 million.

Thank you again, Mr Chairman, for allowing me to testify in support of these projects.

BLACK WARRIOR, WARRIOR, TOMBIGBEE WATERWAY

Mr. Chairman it is a privilege to come before you today to lend my strong support for the fiscal year 1985 funding request for the projects included in the Black Warrior, Warrior, and Tombigbee River System.

The Black Warrior, Warrior, and Tombigbee Waterway is one of our more successful water projects and its growth in tonnage has been exceptional. In 1982, most of Alabama's export coal travelled the Black Warrior, Warrior, Tombigbee and over 4 million tons of coal arrived at electric generating plants via the waterway. Grain from 21 counties in Alabama and Mississippi was shipped to Mobile on the waterway. It also provided substantial movement for commodities such as ore, steel, forest products, petroleum, and chemicals.

The President has requested $12.353 million for operation and maintenance on the Black Warrior, Warrior, and Tombigbee System for fiscal year 1985. The Corps of Engineers' capability, however, is $13.507 million. The O&M funding will be used in large part for routine dredging and snagging and for upkeep and repair of locks and dams. Except for the Oliver Lock and Dam, the system's locks and dams have been modernized allowing traffic to expand significantly -- from 2.5 million tons in 1952 to about 17 million tons in 1979. Adequate maintenance is necessary to allow a smooth traffic flow for maximum efficiency of the system so that its full benefits will be achieved. I urge your consideration of the Corps' full capability for O&M on this project.

Unfortunately, the President's budget request does not include funding for the continued study of replacement of the William Bacon Oliver Lock and Dam. The Oliver Lock and Dam

IS OBSOLETE. ITS DIMENSIONS ARE SIMPLY TOO SMALL TO SIGNIFICANTLY ACCOMODATE THE MAGNITUDE OF TRAFFIC CURRENTLY UTILIZING THE SYSTEM, MUCH LESS THE PROJECTED INCREASE IN TRAFFIC. CONGESTION AT THE OLIVER LOCK AND DAM HAS AFFECTED THE MAXIMUM USE OF OTHER LOCKS AND HAS CREATED SERIOUS DELAYS IN COMMODITIES SHIPMENTS. THE PROBLEM HAS ALSO MADE IT DIFFICULT TO PLAN WISELY FOR PERIODS OF MAINTENANCE ALONG THE SYSTEM. LEGISLATION IS NOW PENDING HOUSE ACTION TO AUTHORIZE REPLACEMENT OF THE OLIVER LOCK AND DAM, AND I AM HOPEFUL THAT THE PROJECT WILL BE AUTHORIZED AND THE MONEY APPROPRIATED THIS YEAR. IN ANY CASE, THE CORPS' STUDY OF THE PROBLEMS AT OLIVER LOCK AND DAM IS VITALLY IMPORTANT TO THE OVERALL EFFECTIVENESS OF THE SYSTEM AND MUST CONTINUE. I URGE THE COMMITTEE TO APPROVE $2.35 MILLION FOR THIS PURPOSE.

THANK YOU, MR. CHAIRMAN, FOR PERMITTING ME TO TESTIFY IN SUPPORT OF THE BLACK WARRIOR, WARRIOR, AND TOMBIGBEE RIVER SYSTEM AND FOR YOUR CONSIDERATION OF ITS NEEDS.

STATEMENT OF REPRESENTATIVE WILLIAM L. DICKINSON OF ALABAMA

ALABAMA-COOSA RIVER WATERWAY

Mr. Chairman and Members of the Committee, thank you again for the priviledge of presenting my views to you regarding the development of the Alabama-Coosa River Waterway.

As you know, the state of Alabama is blessed with a great network of approximately 1,600 miles of navigable waterways. We need to continue the great work that the Congress has funded in the past that will in the future connect all those waterways with the Tennessee and the remainder of our inland waterway system.

Specifically, I am before you today to recommend your approval of FY 1985 appropriations for the Alabama-Coosa river system that will continue ongoing work on that system. During 1982 and 1983 the Alabama River enjoyed a steady increase in traffic, a trend which is expected to continue. This increase, which came during a period of decline on other waterways, indicates that the waterway has become an important factor in the economy. Our near natural waterways, certainly including the Coosa, are the most energy efficient and least environmentally disruptive modes of transportation -- to the benefit not only of our state, but to the entire nation.

As you know, we now have a nine foot navigation channel open from Mobile to the lowermost Coosa River Dam, approximately 27 river miles above Montgomery. We have had commercial river traffic to Montgomery since the spring of 1972 when Jones Bluff Lock and Dam was opened.

A study of the Coosa navigation project concludes that total benefits will far exceed total costs and that planning and construction on the Coosa River should go forward, to obtain the maximum benefit from the investment we already have in the system. The economic benefits of the Coosa project clearly indicate that the sooner construction begins, the sooner the great economic and social benefits will be realized.

The following requests for Fiscal year 1985 are shown by category and amount:

Surveys	President's Budget Request	Our Request
o Alabama River below Clairborne L&D, AL	250,000	250,000
o Dalton Lake, GA	700,000	700,000
o Mobile Harbor Deepening	1,000,000	1,000,000
Operation and Maintenance		
o Alabama-Coosa River, AL*	7,769,000	11,000,000
o Millers Ferry L&D, AL	3,540,000	3,540,000
o Robert F. Henry L&D, AL	2,479,000	2,479,000
o Mobile Harbor, AL	4,578,000	4,578,000
o Allatoone Lake, GA	4,399,000	4,399,000
o Carters Lake, GA	2,180,000	2,180,000

Mr. Chairman, The Coosa-Alabama has a direct effect on 18 counties and 21 municipalities along the waterway from Mobile, Alabama to Rome, Georgia, many of which are in my Congressional District. I believe it will be in the vital interests of our nation to again put the Coosa back on the front of our nation's waterway projects. I want to thank the Chairman and members of the Committee for so graciously permitting me to testify for this project today.

Thank you.

APALACHICOLA-CHATTAHOOCHEE-FLINT WATERWAY

The Apalachicola-Chattahoochee-Flint (ACF) Waterway holds vast potential for the district I represent in Southeast Alabama and for Southwest Georgia and Northwest Florida.

Figures developed recently by the Mobile District, Corps of Engineers, show that in 1980, 30,432 industrial and related service jobs inthe Tri-States area were related to waterway transportation. These jobs produced annual wages of $192,900,000. Area farmers also paid less for fertilizer and received slightly better prices for soybeans, wheat and corn because of the availability of barge transportation.

These benefits came to our area even without the Congressionally authorized 9 by 100 foot channel, which had never been completed through the Florida portion of the waterway primarily because of rock abstructions. The rocks have now been removed.

The Corps of Engineers has predicted that channel completion could result in approximately 71,000 jobs with earnings of almost $600,000,000 in the Tri-State area by 1990 related to the waterway.

The rock removal has already resulted in great interest in the waterway. The Georgia Ports Authority alone has contracted with six new users of its ACF ports. A conference at Eufaula February 1 to prepare Alabama communities to take advantage of new waterway opportunities, drew 230 participants. The Tri-Rivers Waterway Development Association has announced a change in the director of its efforts from channel improvements back to the original purpose orderly development.

Chances now look good that the ACF Waterway within five years can reach the 3.6 million tons of cargo annually that the Corps considers essential for economic operation.

The three states are now in a five year study, with the Corps included, to examine waterway problems to determine how the waterway can best serve the region.

I am pleased that the President included in his FY 1985 budget $4,060,000 for operation and maintenance of the ACF Waterway and George Andrews Lock and Dam. I ask you to act favorably on that request. The President has also proposed in his budget request that the Corps reopen its continuing "308" study of the ACF, at a cost of $250,000 the first year. Corps spokesmen say that funding would allow them to connect with and build upon the work already well underway by the ICC. The "308" study would extend over three years and cost an estimated total of $1.3 million.

It would be especially helpful not only to our regional economy, but also for the nation's, for you to favorably consider these requests. Investment in a resource such as the ACF Waterway which stimulates private economic development in a region with untapped potential seems one of the most appropriate possible uses of public funds.

BLACK WARRIOR-TOMBIGBEE RIVER SYSTEM

Mr. Chairman and Members of the Committee, I want to thank you for the opportunity to appear before you again this year to discuss the FY 1985 budget requests of the Corps of Engineers for maintaining, operating and improving the established and vital Black Warrior-Tombigbee River System.

The system serves a multitude of users including manufacturers; iron ore and steel; finished products; coal and petroleum; agriculture; crude and fuel oils; chemicals; aggregates; wood products; small business; and private citizens. Thousands of farmers from 21 Alabama and Mississippi counties ship their grain over the system to Mobile for export to many parts of the world.

Use of this system has boomed. Twenty-nine years ago it carried three million tons a year. Today, its traffic is almost 20 millions tons and by 1987 it will carry approximately 26 million tons.

We appreciate the improvements which have already been made to the system. All of the outmoded and inadequate locks have been updated except one -- the William Bacon Oliver Lock and Dam at Tuscaloosa. Because it is less than standard width and length and smaller than the other locks on the system, it is a bottleneck, and is stalling the orderly flow of traffic. As you know Oliver replacement has been favorably reported by the Board of Engineers for Rivers and Harbors, and its authorization is pending. We would appreciate approval of $2.85 million in survey funds to provide for an orderly continuation of the planning and engineering on the replacement of Oliver Lock.

I would also strongly recommend approval of $12.9 million requested by the Corps of Engineers for operation and maintenance on the Warrior-Tombigbee facilities and channel within Alabama as well as $2.5 million for the Corps additional capability.

Mobile Harbor is one of the finest harbors in the entire world. It is vital to the economic prosperity of not only my District, but the state of Alabama and the entire southeast. Please approve approximately $4.4 million for operation maintenance of the Mobile Harbor Facility.

We respectfully request that you favorably consider the needs of Warrior-Tombigbee. The waterway's benefits to the regional and national economy far exceeds its cost.

We need an efficient and reliable waterway if we are to remain competitive in local, national, and world markets. We can barely compete in world markets today and without Warrior-Tombigbee,many of our farmers, industries and businesses employing thousands of people could not make it.

Thank you.

COOSA-ALABAMA RIVER SYSTEM

STATEMENTS OF:

RAY CARLSON, DEPUTY VICE PRESIDENT, COOSA-ALABAMA RIVER IMPROVEMENT ASSOCIATION

LISTER HILL PROCTOR, PRESIDENT, COOSA-ALABAMA RIVER IMPROVEMENT ASSOCIATION

MARY GEORGE WAITE, VICE PRESIDENT, FOR AL, COOSA-ALABAMA RIVER IMPROVEMENT ASSOCIATION

Senator COCHRAN. Our next witness is Chris Heinz who is president of Coosa-Alabama River Improvement Association and you have colleagues who are with you, we understand. We ask you to introduce those with you and who are accompanying you. We have a statement from Lister Hill Proctor, who is president of the improvement association which we will make a part of the record in full, along with the other supporting statements which you have submitted.

[The statements follow:]

STATEMENT OF LISTER HILL PROCTOR, PRESIDENT, COOSA-ALABAMA RIVER IMPROVEMENT ASSOCIATION, INC.

Mr. Chairman and distinguished Committee Members:

I am pleased to submit this statement on behalf of our Association. Our membership includes a grassroots representation of the citizens along the Coosa-Alabama waterway from Mobile, Alabama to Rome, Georgia. In addition to private sector firms and individuals, our membership includes twenty-three municipalities and eighteen counties. Elected officials in these local governments see continued development of the waterway as an essential element in the economic future of our region. My home county, Talladega, and four municipalities in that county, including my home town of Sylacauga, are members of this Association.

The tabulation below shows the projects and the specific funding requests we are making for Fiscal Year 1985. The projects are located along the waterway from the Port of Mobile inland to the headwaters of the Coosa River in Northwest Georgia. In all but one project, we recommend the amounts contained in the Civil Works Budget Request.

Project	President's Budget Request	Our Request
Surveys		
. Alabama River below Claiborne L&D, AL	250,000	250,000
. Dalton Lake, GA	700,000	700,000
. Mobile Harbor Deepening	1,000,000	1,000,000
Operations and Maintenance (O&M)		
. Alabama-Coosa River, AL*	7,769,000	9,653,000
. Millers Ferry L&D, AL	3,054,000	3,054,000
. Robert F. Henry L&D, AL	2,479,000	2,479,000
. Mobile Harbor, AL	4,578,000	4,578,000
. Allatoona Lake, GA	4,399,000	4,399,000
. Carters Lake, GA	2,180,000	2,180,000

We bring this delegation and a collection of supporting statements to show the members of Congress that we are serious about maintaining and improving the waterway. We do not take the waterway for granted by any means. Also, we want to express our appreciation for the constructive work which has been done by this Subcommittee to bring the navigation channel to its present level of development. Making the best possible use of our water resources constitutes an investment in our nation's future, and we sense that you are eager, as we are, to get on with the job of building again.

The supporting statements come from our Congressional delegations, Governor Wallace and other State officials, from local governments, from an association of mayors, and from private firms and individuals. We request that these statements be entered into the record. We also submit for the record a listing of the members of our delegation and the constituencies they represent. Many of these individuals come to these hearings at their own expense, year after year, out of a firm conviction of the value of a developed waterway. I know you appreciate their spirit of service and their willingness to contribute to your deliberations.

Now I will present our views on the individual projects we are supporting. We work closely with Corps of Engineers personnel at the District and Division level. We appreciate their assistance with our efforts to stay abreast of the work planned. We feel that our interests are considered as the new budget requests are being formulated.

The Alabama-Coosa Waterway starts in the foothills of the Appalachians in Georgia. Two existing projects, Allatoona and Carters Lake, are located on headwater rivers. In addition to generating hydropower, these projects provide flood control and important reserve storage for the existing navigation channel far downstream. The multipurpose facility at Allatoona on the Etowah River was built in 1950. This was the first project constructed under the 1945 Congressional authorization for "the initial and ultimate development of the Alabama-Coosa River and tributaries ...". We support the Budget Request level of funding for Operations and Maintenance of Allatoona and Carters Lake and for the continuing Survey of the feasibility of a proposed reservoir at Dalton, Georgia.

Now I refer to the Alabama River channel which was opened to navigation in 1972. The official tonnage in 1982 was a record 2.5 million tons, appreciably ahead of the 1.9 million projected when the project was authorized. We estimate that the total for 1983 approached 4.0 million with a further increase this year. The increases in traffic on the Alabama River came during a period of decline in cargo moved on most of the nation's waterways. The Alabama River barge channel has become the important economic resource that was intended when it was built, and there is more on the way. In 1983, for example, applications were made to the Corps of Engineers for dredging two new ports on the Alabama River. One is a public port planned for Selma, Alabama, about two-thirds of the way up the channel toward Montgomery. This port would serve an established industrial park at Craig Field, an installation closed by the Air Force a few years back. The new port holds promise to assist with recovery from the economic disruption which came when the installation closed. The second new port is a private venture in Montgomery which will expand an existing dock and warehouse operation.

These new ports will bring more diversified cargo on the river. Up to now there has been a concentration in building aggregates, limestone and wood products. Much of the increase in tonnage in 1983 came with a new concept for barging tree length logs to a Scott Paper mill in Mobile. In a major conversion, plant management has gone from bringing all of its pulp wood in by rail and barge to a goal of bringing 70% or more by barge.

One of our Association objectives has been to make navigation on the Alabama River as trouble free as possible. We established a Navigation Advisory Committee to work with the Corps of Engineers, the Coast Guard and prospective shippers to produce improved navigation charts, better communications, improved navigation aids, and more responsive channel maintenance. The Committee put together a pamphlet entitled "The Alabama River Barge Channel ... A Shipping Advisory" which became available in January. A prime objective for the pamphlet was to provide information on how the river can be used for industrial development personnel and their client firms who might locate on the waterway. The information is also valuable to marine operators and shippers who may not be familiar with the river.

Because of this increased shipping activity on the Alabama River, we are recommending a somewhat larger appropriation for the Alabama-Coosa River Project. Included in both the $7.8 million contained in the President's Budget Request and the $9.7 million Corps capability figure are an increment above normal Operations and Maintenance for rehabilitation of the lower 72 miles of the channel. This winding stretch of the river downstream from the first lock at Claiborne has become increasingly troublesome. The dependable 9 ft. channel anticipated by those who made investments on the river often has not been available. Studies conducted by the Corps show that rehabilitation of training dikes and modification of the dredging profile are needed to improve the reliability of the channel. The work will spread over a two year period. The increase in FY1985 funding would not add to the total cost. We want to see as much of the work done the first year as possible. In addition to the growth in tonnage we have already seen, we anticipate even more when the Tennessee-Tombigbee corridor to the north opens in 1985.

We support continuing the survey study of the Alabama River below Claiborne Lock and Dam. We have stayed in touch with this study of long range needs that go beyond the rehabilitation work planned for FY85 and FY86.

The Alabama-Coosa, the Tenn-Tom and the Black Warrior-Tombigbee all are inland waterways that connect with the Port of Mobile. It is imperative that we maintain this Port as one of the major economic assets of the nation. We support the Budget Request funding for Operation and Maintenance and the continuing Survey Study of the Harbor Channel. Similarly, we support the suggested O&M funding for the Millers Ferry and Robert F. Henry lock and dam projects. We note with considerable pride the new Robert F. Henry name for Jones Bluff facility. A ceremony marking the new name was conducted by our members on May 28, 1983.

Before closing this testimony with some remarks about extending the barge channel along the Coosa River, we wish to express our support for two matters beyond the confines of our particular waterway. First, we urge replacement of the existing William Bacon Oliver Lock and Dam on the Black Warrior River. This obsolete structure has become a serious bottleneck to shipping and has correctly been rated as one of the high priority needs of the national waterway system. Plans to include a power turbine in the replacement facility makes the project even more attractive.

The second proposal we wish to support is related to the Tennessee-Tombigbee Waterway. Legislation has been introduced in the House to name the Lock and Dam and the Visitors Center at Pickensville, AL for Congressman Tom Bevill. We feel this would be a fitting tribute to one of the great "movers and doers" on behalf of our nation's waterway system. In our own small way we proudly presented our Association's highest achievement award to Chairman Bevill in January of this year. At that time we made specific mention of his outstanding contribution to the Tennessee-Tombigbee navigation channel as well as to the Alabama-Coosa.

The Committee Members will note that we have not included funds for the Coosa River Navigation Project in our recommendation for Fiscal Year 1985. This does not mean that we think any less of the Project. In fact the Coosa channel remains as one of our primary objectives. However, we reluctantly conclude for the interim that the timing is not right for the Coosa Project to be one of the first new construction starts in nearly eight years.

During the 1950's our nation experienced a comparable period with no new waterway project starts. Fortunately there was a reversal of policy and a renewed commitment to use public works to stimulate regional development. As a result, the magnificant McClelland-Kerr Arkansas River Navigation Project and our Alabama River Navigation Project were built.

We feel that there must be, and we feel there will be, a similar reversal of recent public policy regarding new waterways. Waterways bring improved efficiency, new industrial muscle and increased commerce among strong regional trading partners. Without a policy reversal, these benefits could no longer be added to our national inventory. When substantial cost sharing is a prerequisite, and only national benefits are included in the marketplace test, none but regions already well developed would ever have a waterway project.

In the Coosa River Valley, which in its entirety is located in Appalachia, just the opposite conditions exist. Underdeveloped, with chronically high rates of unemployment, the Coosa River counties and cities urgently need that new ingredient which will make them self-sufficient. Fortunately, as we reported last year, the Coosa Valley is positioned to benefit from the new waterway. The regional or induced personal income benefits of the project have been rigorously projected and shown to more than cover the estimated costs.

A principal reason planning for the Coosa Project was suspended last year was that the State of Alabama had not made the necessary financial commitment to cover certain prescribed non-Federal costs. We can report some progress on this matter. Governor Wallace has given his assurance that this commitment will be made. However, the required legislative actions are not completed. When this matter has been resolved and the necessary agreements have been signed we will return to this Committee with proposals to resume work again.

We ask the members to see the true potential of the Coosa River Navigation Project to benefit an underdeveloped region; to see the Coosa Project as one of the few remaining opportunities to extend our inland navigation system; and to see the Coosa Project as a national investment opportunity which we cannot afford to miss. We have massive job training programs in existance today. We feel an equal emphasis must be given to creating those jobs upon which the training is predicated.

Thank you for the opportunity to appear before this distinguished Subcommittee. We will continue to speak up on behalf of the waterway. The Alabama-Coosa has already demonstrated its value; both as an artery into our region and as an integral part of the national transportation infrastructure.

COOSA-ALABAMA RIVER IMPROVEMENT ASSOCIATION'S DELEGATION APPEARING BEFORE THE SENATE SUBCOMMITTEE ON APPROPRIATIONS FOR ENERGY AND WATER DEVELOPMENT HEARINGS 2:00 P. M. - APRIL 2, 1984.

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1. Lister Hill Proctor, President, CARI Association, Sylacauga, AL
2. ~~Janice C. Proctor, Businesswoman, Sylacauga,AL~~
3. W. M. Rushton, Director Alabama Department of Economic & Community Affairs, Mtgy.,AL
4. Otha Lee Biggs, Judge of Probate, Monroe County, Monroeville, AL
5. Kenneth Fairly, AL River Pulp, Monroeville, AL
6. Hugh H. Williamson, Mayor of Pell City, AL
7. Paul Turner, Councilman, Pell City, AL
8. Dr. R. F. Cox, Councilman, Pell City, AL
9. Forrest A. Walls, " " " "
10. Barnett Lawley, " " " "
11. Keith Porter, " " " "
12. Robert Moman, AL Gas Corporation, Gadsden, AL
13. Juanita Moman, Businesswoman, Gadsden, AL
14. Mary George Waite, Vice Pres. for AL, CARIA, Centre, AL
15. Meg Graves, Student, Centre, AL
16. Bart Arnold, Mayor, Town of Ragland, AL
17. Albert Gray, Councilman, Town of Ragland, AL
18. David T. Stockman, Administrator, Montgomery County Commission, Montgomery, AL
19. Walter B. Stevenson, Jr., AL DECA, Montgomery, AL
20. J. T. McKenzie, AL Power Company, Gadsden, AL
21. Charles W. Roe, President, Greater Gadsden Chamber of Commerce, Gadsden, AL
22. Ron Carr, City Planner, City of Gadsden, AL
23. Wendall Bryant, Commissioner, Etowah County Commission, Gadsden, AL
24. W. A. Lutes, " " " " " "
25. Jesse Burns, " " " " " "
26. Phillip Sanguinetti, President, The Anniston Star, Anniston, AL
27. Marion Sanford, Councilman, City of Wetumpka, AL
28. ~~Edward W. Enslen, Judge of Probate, Elmore County, Wetumpka, AL~~
29. ~~Louise Enslen, Businesswoman, Wetumpka, AL~~
30. Melvin Curlee, Commissioner, Elmore County Commission, Wetumpka, AL
31. ~~Ken Chesnut, Councilman, City of Camden, AL~~
32. ~~Mrs. Ken Chesnut, Housewife, Camden, AL~~
33. J. Wallace Tidmore, Anne Henry Tidmore Flags, Montgomery, AL
34. Sue Glidewell, Mayor of Rainbow City, AL
35. John F. Knight, Jr., Commissioner, Montgomery County, Montgomery, AL
36. Joel W. Barfoot, " " " " "
37. J. H. Trotter, Jr., Engineer, " " " "

38. Floyd Beddingfield, City of Gadsden, Gadsden, AL

39. George Sizemore, City Council, Gadsden, AL

40. Sid Willingham, Insurance and Real Estate, Rome,GA

41. Virginia Willingham, Housewife, Rome, GA

42. Burgett H. Mooney, Jr., Vice Pres. for GA, CARIA, Rome, GA

43. H. F. (Ted) Hunter, Jr., Businessman, Rome, GA

44. Tom Brock Jordan, Businessman, Centre, AL

45. Jamie Jordan, Businessman, Centre, AL

46. Jerry Dunwoody, City Council, Rome, GA

47. John Perry, Editor, Rome News-Tribune, Rome, GA

48. D. J. Petruccelli, Exec. Vice Pres., Greater Gadsden Chamber of Commerce, Gadsden, AL

49. Sheldon L. Morgan, Merchants National Bank, Mobile, AL

50. Nick Barchie, Warrior & Gulf Navigation Company, Chickasaw, AL

51. Tim Parker, Jr., Parker Towing Company, Tuscaloosa, AL

52. E. G. "Buddy" Browning, Jr., AL State Docks, Mobile, AL

53. Billy Powell, AL Cattlemen's Association, Montgomery, AL

54. Marrion Rambeau, Mobile Area Chamber of Commerce, Mobile, AL

55. C. R. Carlson, Executive Vice President, CARIA, Montgomery, AL

56. John L. McCarron, Ryan Walsh Stevedoring Company, Mobile, AL

57. Paul Manning, Commissioner, St. Clair County Commission, Ashville, AL

58. Christopher N. Fowler, Commissioner, St. Clair Co. Commission, Ashville, AL

59. Ada W. Paravicini, Adm. Assistant, CARIA, Montgomery, AL

60. N. A. Nicolson, Ideal Basic Industries, Inc., Mobile, AL

61. Richard Lindsey, State Representative, Centre, AL

62. Mrs. Richard Lindsey, Housewife, Centre, AL

63. Ralph Meade, Chairman, Cherokee County Commission, Centre, AL

64. Charles Young, Commissioner, Cherokee County, Centre, AL

65. Judge James Corley, Chmn., ~~Robert C. Edwards, Engineer~~, Autauga County Commission, Prattville, AL

66. Melvin Taylor, Jr, Elmore County Comm., Tallassee, AL

67. Judy Taylor " " "

68. Jim Ludwig Southern Company. Birmingham, AL

STATEMENT OF GOV. GEORGE C. WALLACE OF ALABAMA

It is a privilege and a pleasure to address this Subcommittee along with the members of the Coosa-Alabama River Improvement Association in support of navigation on the Alabama-Coosa River System. Specifically, we endorse the request of the Association and its supporters for continued funding during FY 85 of navigation on the Alabama River. We wish to again express our strong support for the full-time operation and the necessary maintenance of the Alabama River waterway.

This waterway provides a vital link into the heartland of Alabama connecting the Central Alabama area to the Gulf Port of Mobile and the other waterways of our National Inland Waterway System. This provides a dependable, safe and cost effective method of transportation of materials and products, both industrial and agricultural as well as provide jobs and opportunities for many in Alabama.

During 1982 and 1983 there has been a steady increase in traffic on the Alabama River. This increase, at a time when traffic on many other waterways declined, indicates that this waterway has become an important factor in the economy of Alabama and the region. For example, Scott Paper Company and Ideal Basic Industries are among the largest of the new users. They have changed their method of moving bulk materials to their Mobile plants and have made major investments in facilities, tow boats and barges.

We support the level of funding in the President's Civil Works Budget Request for FY 1985 for the various projects along the Alabama-Coosa River System with one exception. We support the Association's request for funding above the Budget Request for the Alabama-Coosa Project in the amount of $9,653,000. This funding level is an increment over and above what is needed for regular operation and maintenance expenditures. The extra funds would be used for rehabilitation work needed to improve the reliability of the 9-foot channel during dry seasons in the lower reach of the Alabama River. This work is to be accomplished over a two-year period. We are convinced that, due to the increased use of the river, much of this work needs to be completed during the first year.

In closing, I would like to pledge my support and again express the intentions of the State of Alabama to adequately meet its responsibilities and obiligations for the Alabama-Coosa project as defined by Congress. I would also like to express thanks to you and all the members of the Subcommittee for your support over the years and for your assistance in insuring adequate funding is provided for the operation and maintenance of the existing Alabama River project and the progress thus far on the proposed Coosa River project.

STATEMENT OF W. M. (BILL) RUSHTON, DIRECTOR, ALABAMA DEPARTMENT OF ECONOMIC AND COMMUNITY AFFAIRS

I want to thank you for the opportunity to appear before this Subcommittee along with my fellow Alabamians in support of navigation of the Alabama-Coosa River Waterway. Specifically, we endorse the request of the Coosa-Alabama River Improvement Association and its supporters for continued funding of the full-time operation and the necessary maintenance of the Alabama-Coosa River Waterway during FY 1985.

This waterway provides a vital link into the heartland of Alabama connecting the Central Alabama area to the Gulf Port of Mobile and the other waterways of our National Inland Waterway System. This provides a dependable, safe and cost effective method of transportation of materials and products, both industrial and agricultural as well as provide jobs and opportunities for many in Alabama.

The existing navigation project on the Alabama River is proving to be, even in these economically depressed times, a cost effective method of low cost commercial transportation. It has provided for numerous new opportunities and jobs in central and south Alabama. Several new industries have located in the area based on the availability of waterway transportation. In several instances, the waterway has provided for the opportunity to develop resources which are vital to the future of the area, but, could not have been developed without the navigation project. The existing project, in addition to commercial navigation, provides for hydroelectric generation, fish and wildlife enhancement and recreational opportunities, all in harmony with sound environmental policy.

While we support the President's Civil Works Budget Request for FY 1985, we agree with the Association's position that a funding level of $9,653,000 is needed for the Alabama-Coosa Project. This funding level which is $1,884,000 above the President's Request, would provide adequate funding for regular Operation and Maintenance expenditures as well as extra funds needed for rehabilitation work to improve the reliability of the 9-foot channel during dry seasons. Even though this work is scheduled over a two-year period, we are convinced that most of this work needs to be completed during the first year. The extra funds would insure this.

In closing, I would pledge my support and that of the Alabama Department of Economic and Community Affairs in assisting the State of Alabama to meet its responsibilities and obligations for this project as defined by Congress. I appreciate the support and assistance which you and all the members of the Subcommittee have given us over the years and for insuring adequate funding is provided for the operation and maintenance of the existing Alabama-Coosa River Project.

STATEMENT OF JAMIE ETHEREDGE, DIRECTOR, ALABAMA DEVELOPMENT OFFICE

The Alabama Development Office assists representatives of industry who might be interested in moving to Alabama. One of our prime attractions is the availability of economical and dependable water transportation. Last year I was able to be present for these hearings and make a statement in person. This year it is not possible for me to be present, but I ask that my support and that of the Alabama Development Office become part of the record of these hearings.

In 1980, this office joined with the Coosa-Alabama River Improvement Association in producing informational materials on how the Alabama River barge channel is, and can be, used. The most recent brochure was published last January. We are very pleased to see the steady increases in traffic on the Alabama River which occurred despite the general slow down in economic activity in 1982 and 1983.

We credit the Association with an important assist in improving the use of the barge channel, and also in representing the State's interest in maintaining and improving the waterway to your subcommittee.

Maintaining and improving the waterway and the Port of Moible that it serves are a prudent investment in our nation's transportation infrastructure. I also join in the recommendation that you keep the Coosa River Navigation Project high on the list of opportunities to invest in our nation's economic future.

STATEMENT OF ROBERT M. HOPE, DIRECTOR, ALABAMA STATE DOCKS DEPARTMENT

Dear Mr. Chairman:

It is certainly a pleasure to again appear before this Committee along with other Alabamians in support of navigation on the Alabama and Coosa Rivers. The Alabama River connecting the heart of Alabama to the Gulf Port of Mobile and the Gulf Intercoastal Waterway is an integral part of the national Inland Navigation System.

Mr. Chairman, I again would like to thank you and your associates for your continued interest in and dedication to the great Waterway Systems of our United States. The national Inland Waterway System provides a major conduit for export and import of raw materials, finished products, and the wood and fibre we use and sell.

It assists us greatly in the balance of trade with other nations and provides transportation of materials and products at the lowest cost possible to and from deep-water ports such as Mobile allowing the United States to be competitive in world markets.

Our own Alabama-Coosa River System provides an economical and energy effective method of transporting products and materials between the Port of Mobile and the heartland of Alabama. It allows our farmers as well as commercial and industrial interests an economical method of producing and transporting the products that the world needs for nourishment and for sustaining a quality standard of life.

We join with and support Mr. Ray Carson, Executive Vice President of the Coosa-Alabama River Improvement Association, as well as other members of the Association in their request for funding full-time operation and the necessary maintenance of the existing navigation system on this Waterway.

Lower freight rates produced by the Waterway give manufacturers and farmers a better chance at export markets, and this System has proven in its short life to be cost effective. Each year additional materials and products move on this System and with the completion of the Tennessee-Tombigbee Waterway the navigation of the Alabama River segment will be even more important.

The State of Alabama has expended millions of dollars in support of navigation of the Alabama-Coosa System by providing the nonfederal support required. The Alabama State Docks Department has expended within the last eight years in excess of two hundred and fifty million dollars in renovations, refurbishings, and new construction projects at the terminal port to place itself in a position to handle increased cargoes entering and exiting the Port which have previous or subsequent movement on the inland waterway systems of Alabama.

We wholeheartedly support the individual project needs previously expressed by the Coosa-Alabama River Improvement

Association and in concert with the Association and the Governor of the State of Alabama we again request full funding for this vital navigation project.

The inland navigation system is an integral part of the national transportation system of the United States which the State of Alabama as well as other states and private enterprise have invested large sums of money over the years. The total impact of these water transportation corridors on the continued vitality of our nation should never be under estimated.

STATEMENT OF CHARLES R. LOWMAN, GENERAL MANAGER, ALABAMA ELECTRIC COOPERATIVE, INC.

We present the following statement for inclusion in the record of these proceedings, and urge you and your colleagues to give it the most serious consideration.

STATEMENT OF ALABAMA ELECTRIC COOPERATIVE, INC. ON FY85 FUNDING FOR THE COOSA-ALABAMA RIVER PROJECT

1. Alabama Electric Cooperative, Inc. (AEC) generally supports development of our nation's waterways, including this project. Waterway development provides many important benefits to industrial and agricultural shippers. Although many of these benefits cannot be precisely measured, the history of our nation's waterway development policy clearly shows that the public benefits of these projects have been determined to outweigh the costs of development.

2. However, AEC opposes, and urges Congress to critically and thoroughly re-examine, an important but little-known aspect of waterway development. This problem is non-recognition by the Corps of Engineers of damages to banks, shoreline and adjacent lands caused by Government projects. This is a problem which we believe should be brought to the attention of the entire Congress.

We are quite familiar with this problem, and in fact are now in litigation with the Corps of Engineers as a result of extensive bank erosion in the Eureka Landing area of the Alabama River. This erosion forced AEC to initiate a major protection program for a transmission line support tower, and we have spent approximately $600,000 in construction, engineering and interest charges to stablize and protect the tower.

The severity of the erosion may be judged from the fact that when the tower was built in 1967, it was 75 feet from the riverbank - today, the water is literally at the base of the tower, with no sign that the erosion has stopped. I am enclosing a photograph taken in late 1982 for your inspection.

The cause of this erosion is a series of dikes at California Bar just upstream about one-half mile from AEC's tower. The dikes were built in the mid-1970's; prior to this time, the Corps had already caused some bank erosion in the area as a result of dumping dredge spoil in the river and tailwater surges from the Claiborne Dam. Installation of the dikes caused the erosion to be greatly accelerated, so that by August 1981 we determined that our tower was in danger of being washed away by the river's movement.

In the early 1970's the Corps admitted (in internal memoranda) that its activities caused the initial erosion. I enclose copies of various examples. However, the Corps has officially denied any causal relationship between the dikes and the erosion - apparently dike construction is one of the Corps' "sacred cows." We note that the Corps now proposes to construct additonal dikes on the Alabama River to remedy the problems caused by the last set they built.

In the course of litigation, AEC discovered that the Corps had given no meaningful design consideration to bank protection, or the effects of the dikes on the river's banks, at all. In fact, we discovered that the Corps' engineers had violated many principles of river control contained in the Corps' own design manual at the time.

In a nutshell, the Corps has consistently claimed that dikes, which are built in and therefore are designed to obstruct and divert the river's flow, have no effect on the riverbanks themselves. A five-year old child knows better than that. The actual effects of dikes can be demonstrated (a) theoretically, (b) by modelling, and (c) by simple observation of effects in areas where they have previously been built. Thus the blanket refusal of the Corps to acknowledge these effects amounts to total disregard of the property rights of adjacent landowners whose property has been and will be damaged as a result of Government projects.

AEC's problems in this area are not unique. Many other individuals have lost their property, in whole or in part, as a result of Corps operations. I am enclosing a photograph of a house just downstream from our tower - the photo speaks for itself. Interestingly, the owner of the house was initially paid about $3800 for an erosion easement, but when the extent of the erosion became apparent the Corps refused to acknowledge further responsibility. In the late 1970's, the Corps reversed course and began denying any erosion or bank protection responsibility. This is in sharp contrast to its previous admissions in the memoranda enclosed.

Most of the people who have been damaged in this area are individuals, who have neither the resources nor the sophistication to oppose the Corps or recover compensation. Similarly, the problem is not confined to this stretch of the river, or even this river. An examination of Corps claim files would give an experienced investigator a good indication of what projects have uncompensated erosion damages.

The real problem is institutional attitude - from our case, we have learned that the Corps is willing, even eager, to spend millions of dollars on construction projects, but will not spend the necessary money to compensate those who property is damaged as a result of Corps projects.

Congress should put an immediate halt to this state of affairs. After all, it is your constituency that the Corps is ignoring, and we naturally look to you to rectify the situation.

In closing, let me again emphasize that AEC supports waterway development. However, the full cost of these developments, including damage costs, should be borne by the Government and reflected in the Corps budget, since these are public projects. Otherwise, those whose property is damaged without compensation will, in effect, be required to bear part of the project's costs unless they resort to litigation, which is always expensive and time-consuming, and often uncertain.

Thank you for the opportunity to present our views on this important subject. We are confident that you and your colleagues will not forget us.

TRIP REPORT

1. SUBJECT: Inspection of Bank Erosion, Alabama River, Nav. Mile 42.8

2. DATE: 2 December 1971 LOCATION: Eureka Landing, Mile 42.8

3. ATTENDEES: Mr. Windell C. Owens, Landowner
G. B. McDonald, Jr., EN
B. W. Odom, Jr., EN

4. PURPOSE OF TRIP: To inspect the reported erosion of the left bank of the river at Eureka Landing which is just downstream from California Bar.

5. NARRATIVE: The attendees from the Corps met Mr. Owens at the site. Mr. Owens owns a fairly new and somewhat expensive cabin which is on a small lot located adjacent to the bank of the river. His lot and 3 others are on the outside of a shallow bend just downstream from a frequently dredged reach known as California Bar. California Bar is also the site of an old dike field to be rehabilitated by new dikes under the upcoming channel stabilization work for the lower Alabama River. Mr. Owens contends that the method of dredging at California Bar and the method of operation of the Claiborne Spillway has caused the erosion of his property and also the erosion of the property of the adjacent 3 landowners. Copies of related correspondence, including a letter from Mr. Owens received after the subject inspection, are attached. The undersigned is of the opinion that Mr. Owens is partially correct and that the activities of the Corps have to some extent aggravated the rate of bank erosion along that reach of the river. An attached copy of a trip report dated 15-17 October 69 describes the method of dredging which was used at least once at the site. Also attached is a copy of a Claiborne tailwater recording chart which shows the tailwater fluctuation pattern below Claiborne. It is understood that the method of spillway operation at Claiborne was recently modified to eliminate these surges.

6. RECOMMENDATIONS: Some settlement should be made with Mr. Owens and the adjacent landowners.

Incls
a/s above

B. W. ODOM, JR.
Hydraulic Engineer

Inspection of Bank Erosion, Alabama River from
Claiborne Lock and Dam, to its Mouth

EN
THRU: OR EN-D 25 Feb 72

TO: RE

1. Reference is made to the recent complaints by, and the resulting correspondence with Mr. Windell C. Owens, with regard to bank erosion on the Alabama River and in particular along his property at Eureka Landing, (Nav. Mile 42.8).

2. Representatives of Operations, Real Estate, and Engineering Division conducted an inspection, by boat, of the Alabama River from Claiborne Lock and Dam to its mouth on 24 February 1972. The attendees were:

Captain J. D. Cline	EN-EE
Mr. L. E. Lewis, Jr.	RE-PC
Mr. J. W. Maddox	OP-O
Mr. E. Varner	TAO
Mr. B. W. Odom, Jr.	EN-DV

3. The purpose of the inspection was to determine if there are other reaches of bank erosion similar to that at Eureka Landing which could be conceivably attributable to Corps activities.

4. The bank recession at Eureka Ldg. does appear to be caused, in part, by a combination of tailwater fluctuations at Claiborne Lock and Dam, and by the effects of flow obstruction by maintenance dredge spoil at California Bar (Nav. mile 43). These Corps activities were between September 1969 and late 1971, and have been changed to eliminate any future damage to property adjacent to the river. It should be understood that even at Eureka Ldg., the bank recession was largely due to the natural action of the river.

5. There were no other reaches of bank recession observed during the inspection which could readily be attributed to activities of the Corps.

6. It is recommended that Real Estate Division take necessary actions to relieve the Government of any liabilities in connection with the bank erosion at the subject site. It appears that there are 5 small lots, with improvements, which have experienced bank erosion at the site.

FRANK C. DEMING
Chief, Design Branch

DEPARTMENT OF THE ARMY
MOBILE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 2288
MOBILE, ALABAMA 36601

IN REPLY REFER TO

SAMRE-P

29 February 1972

Mr. Windell C. Owens
Attorney at Law
Monroeville, Alabama 36460

Dear Mr. Owens:

Reference is made to the number of inquiries you have made concerning the river bank sloughing which is occurring in front of your property on the Alabama River downstream of the Claiborne Lock and Dam Project.

We have completed our investigation in this area, and our preliminary findings reveal that the erosive action on the river banks appears to be at least partially attributable to Government operations on the river. It is necessary that this office submit its findings to higher authority for approval prior to initiation of any action to compensate affected landowners for property damages resulting from these operations. If our findings are confirmed, it is expected that the most economical solution to the problem will be in the form of a real estate action which would envision the acquisition of an easement interest in a sufficient area of land deemed adequate to accommodate a natural stabilization of the banks. In your particular case, such an easement would probably encompass the lands on which your dwelling is located, and our appraisal of damages would reflect this situation.

We will expedite a submission of this matter to higher authority in an effort to resolve this matter at an early date.

Sincerely yours,

MELVIN W. DOVITH
Chief, Real Estate Division

SAMEN-ER 6 March 1972
SUBJECT: Status of Agreements with Land Agencies Concerning Cost Sharing the Construction of Access Facilities on the Alabama River Channel Improvement, Alabama

County and the Mobile District, to determine the acceptability of the alternate site and additional cost involved for access. A report will be submitted to SAD after the trip.

4. From the discussion with local government officials of Clarke County, it is the consensus of the Mobile District that a contract in support of cost sharing recreational development on the Alabama River Project can be obtained by 1 July 1972, provided unforeseen obstacles do not arise. If the estimate included herein is acceptable to the officials of Monroe County, that contract could also be completed by 1 July 1972. The contracts would provide for cost sharing of boat launching ramps and supporting facilities.

5. All other necessary real estate interests for this project were obtained from the landowners by direct purchase and there is no requirement for reservation of real estate funds to accommodate payment of deficiency judgements. However, a recent survey of the river banks in this project downstream from the Claiborne Lock and Dam indicates evidence of bank sloughing in several areas which may necessitate the acquisition of sloughing easements. It is recommended that the sum of $50,000 be reserved within the present project estimate for this purpose until detailed investigations can determine the extent of any additional acquisitions necessary.

6. The inclosed estimate indicates the reduction in land and facilities costs, and the benefit-reduction. Without land and development, the Corps could not claim any recreation benefits since there are a number of launching sites on the Alabama River Channel Project.

FOR THE DISTRICT ENGINEER:

1 Incl (dup)
ss

POWELL WILLIAMS, Jr.
Asst. Chief, Engineering Division

SAMRE 25 August 1972

SUBJECT: Revised Segment 5 — Alabama River Channel Improvement

Division Engineer, South Atlantic
ATTN: SADRA

1. Reference is made to ER 1130-2-308, subject, "Policies and Practices - Claims for Damages from Power Operations."

2. Mr. Wendell C. Owens, former mayor of the city of Monroeville, Alabama, has informed this office that the river bank downstream of the Claiborne Lock and Dam Project has been subjected to erosive action to the extent that it has endangered his dwelling. He alleges that the erosion which has occurred is the direct result of the Corps' operations of its power dams on the Alabama River.

3. Investigation by this office has confirmed the extent of bank erosion on Mr. Owens' property and other contiguous lands along the river banks extending for a distance of about 800-1000 feet. A copy of Segment 5 of the Claiborne Project has bean revised to include the area where the bank sloughing is occurring. This area has been subdivided, and five lots (presently containing three dwellings) have sustained some damage from the sloughing action.

4. During the initial phase of the power releases from the William B. Dannelly Project (upstream of the Claiborne Project), the actual fluctuations in the river levels were much move severe than had been anticipated under the projected regulation plan for the Claiborne Dam. Modifications have subsequently been made in the gate settings at the latter project in the interest of obtaining a more uniform flow in the river below that facility. However, the initial discharges, coupled with a sandbar in the river, seem to have been the primary cause of the sloughing action which has occurred along the river banks adjacent to Mr. Owens' property. The sand bar located immediately upstream of his property diverted the accelerated flow from the power discharges against the bank of the complainant's property, producing a scouring action.

5. Evaluation of the claimant's allegations against the conditions set forth in paragraph 3 of ER 1130-2-308 reflects the following:

a. The damages to property are not considered to be consequential in nature.

b. The sloughing action is well above the ordinary high water line and has advanced to a point where it endangers improved properties.

c. One of the owners has taken the initiative by filing a protest requesting that the Government take appropriate action in the matter.

d. The other affected ownerships are closely related to the claimant's (Mr. Owens), and they should be considered in any corrective action which may be authorized.

e. There is a definite evidence of damage constituting a taking as a result of a recurring sustained power operation.

f. It is anticipated that the actual damage can be contained within the boundary of the area proposed for acquisition.

6. With respect to paragraph 5 of referenced ER, a formal gross appraisal has not been made of the land and improvements involved in the area where the erosion has occurred, but a cursory inspection of the property would indicate a total value of approximately $35,000 for the five lots and three dwellings which would be involved. The cost of any effective bank protection measures would far exceed a real estate solution to the problem.

7. Therefore, to effect compliance with paragraph 5 of the referenced ER, it is recommended that this office be authorized to proceed with the acquisition of a sloughing easement which would be imposed over an area considered sufficient to accommodate a natural stabilization of the river banks. Sufficient funds are available to this office to accomplish the proposed acquisition.

8. A draft of reply to letter received from Congressman Jack Edwards concerning this matter is inclosed.

FOR THE DISTRICT ENGINEER:

MELVIN W. DOVITH
Chief, Real Estate Division

[illegible] (25 Aug 72) 1st Ind
SUBJECT: Revised Segment 5 - Alabama River Channel Improvement

DA, South Atlantic Division, Corps of Engineers, 510 Title Building,
30 Pryor Street, S. W., Atlanta, Georgia 30303 28 August 1972

TO: HQDA (DAEN-REA-P)

1. Although not specifically stated in the basic letter, the specific power releases which caused the bank sloughing did not exceed ordinary high water. Notwithstanding this fact, it is believed the Government does not enjoy the same degree of immunity to constructive takings from fluctuating power operations as would be the case if the fluctuations were solely in the interest of navigation.

2. It is, therefore, concluded that because of power operations, even though below ordinary high water, the Government has taken property without authority and the most practical means of correction is through acquisition of a land interest.

3. The recommendation of the District Engineer contained in paragraph 7 is concurred in. This office also concurs in the suggested draft of reply to Congressman Edwards.

FOR THE DIVISION ENGINEER:

Russell

[illegible] RUSSELL
Chief, Real Estate Division

U. S. ARMY ENGINEER DISTRICT, MOBILE
CORPS OF ENGINEERS
NARRATIVE APPRAISAL REPORT
TRACT 509-E
ALABAMA RIVER CHANNEL IMPROVEMENT PROJECT
MONROE COUNTY, ALABAMA

1. ~~Tract Owner:~~ Mason F. Fleming
P. O. Box 2225
East Brewton, Alabama

2. __Legal Description__: See Schedule "A" in Exhibit Section

3. __Certification and Estimate of Value__:

I hereby certify that I have carefully examined the herein described property, that I have no present or intended interest therein and that, based on the assumptions and limitations listed, it is my opinion that the fair market value of the estate being acquired as of 6 December 1972 is $3,750.00.

__Allocation of Values__:

Value of Land In Easement Area	$ 450.00
Damages to Unencumbered Remainder	$3,300.00
	3750.00

James W. Ratliff
JAMES W. RATLIFF
Staff Appraiser

8. __General Discussion of Subject Property__:

The subject property consists of two riverfront lots with 75 feet of frontage each and average depth of 150 feet. These lots lie on a high bank of the Alabama River and the rear, or East lines, are formed by the West right-of-way of the access road. These lots are No.'s. 70 and 71 of the Eureka Landing Camp Sites Subdivision.

This property was acquired by the present owner in 1968 and shortly thereafter he built a recreational cottage on Lot #71. This little house is of brick veneer construction and has 870 square feet of floor space. It has a carport and a small utility room. Sewage disposal is via a septic tank and field lines. The water is supplied by a community water system.

The tract to be imposed with the perpetual sloughing easement will encompass 0.15 of an acre. It is comprised of a narrow strip of land averaging 45 feet wide which extends entirely across the riverfront portion of both lots. The East line of the tract is a straight line extending in a North-South direction parallel with the river. This line lies within 3 feet of the house.

It became necessary to acquire this sloughing easement because of the severe erosion of the riverbank caused by Government action taken to improve navigation. In considering the compensation to this owner for imposition of this easement several factors were considered. It was recognized that the owner is entitled to the value of the area encompassed by the easement. It was also considered that imposition of this easement will cause damages to the unencumbered remainder because of the cloud on the title and because of proximity of the rear line to the house. Conceivably, after acquisition of this easement, the entire area within the easement could slide into the river leaving a vertical bank along the rear easement line and the owner would be entitled to no further compensation unless the sloughing exceeded this line. It is my opinion that the unencumbered portion of the property suffers a loss in value of 25% because of these factors.

DAEN-CWO-M (23 Apr 80) 2nd Ind
SUBJECT: Reconnaissance Report on Alternatives for Improvement of
Navigation on the Alabama River

DA, Office of the Chief of Engineers, Washington, D.C. 20314 23 FEB 1981

TO: Division Engineer, South Atlantic ATTN: SADEN-GC

1. The purpose of the Major Rehabilitation Program is to permit construction of infrequent, costly structural rehabilitation or major replacement works that are intended to extend the useful life of a project or a principal feature thereof at projects operated and maintained by the Corps of Engineers. The primary alternatives presented in the subject reconnaissance report to alleviate the navigation problems on the Alabama River are channel profile deepening by dredging and construction of additional channel flow contraction dikes. These activities do not conform to the Major Rehabilitation Program qualifications.

2. The proposed work may become eligible for accomplishment under other programs. Accordingly, you may continue further analysis by conducting additional Condition and Operations studies using available O&M, funds. These studies should determine the technical feasibility of the various alternatives and the appropriate program under which the work might be accomplished. Consideration can be given to accomplishing solutions as design deficiencies, if appropriate, under the Continuing Construction Program. If modification is expected to require Congressional action to modify the existing project authorization, detailed studies should be budgeted under the Review of Completed Projects Program. The regular O&M program should be used to solve the problem if an increased maintenance effort appears to be the most practicable solution.

FOR THE CHIEF OF ENGINEERS:

L A Nelson

wd all incl

L. A. NELSON
Acting Chief, Construction-Operations Division
Directorate of Civil Works

SAMRE

19 June 1980

Honorable Howell Heflin
United States Senate
Washington, D. C. 20510

COMPARE THE CLAIMS IN THIS LETTER TO THE CORPS' PREVIOUS CLEAR ADMISSIONS AS TO CAUSE.

Dear Senator Heflin:

Reference is made to your letter of 10 June 1980, forwarding a copy of an inquiry received in your office from Clayton and Eva Mae Norris of Frisco City, Alabama, covering the erosion of river banks at Eureka Landing on the Alabama River. It is Mr. and Mrs. Norris' contention that jetties constructed by the Corps of Engineers some years ago are responsible for the erosive action along the river banks. They note that only one individual has been compensated for damages by the Corps and that several property owners have taken the matter to court in an effort to obtain payment for damages sustained to their property.

The jetties referred to by Mr. and Mrs. Norris were constructed by the Government in the early 1970's for the purpose of stabilizing the position of the channel at Eureka Landing, and they have generally functioned as designed in maintaining channel depths and reducing recurring dredging costs. While the sloughing action along the banks seems to have accelerated after placement of the jetties, it cannot be conclusively established that they are contributing in any measurable degree to the bank erosion being experienced by the property owners.

With regard to the compensation of the property owners referred to in the Norris' letter, the Corps during 1973 purchased sloughing easements from four property owners in the Eureka Landing subdivision where bank sloughing was threatening the stability of their dwellings and seriously compromised the utility of their lots. At the time of these easement acquisitions our legal responsibility for the erosion action which had occurred along these several lots could not be categorically established, and it was determined, on the basis of inconclusive factual data then available, to be in the best interest of the Government to negotiate settlements with the property owners rather than become involved in costly lawsuits.

When erosive action continued at Eureka Landing and began to affect additional properties, decision was made to conduct in-depth studies in an effort to ascertain whether the Corps' installation of the jetties was a causal effect of the erosion, and if so was there a legal responsibility on the part of the Government to compensate property owners for damages to their properties. While our studies could not confirm whether the jetties were the primary physical cause of the erosive action, they did clearly establish that the Corps' construction activities in the placement of the jetties was confined below the ordinary high water elevation on the river, and as such was deemed an action within the over-riding navigational servitude of the Government under the Commerce Clause of the Constitution. On the basis of this information we felt we could no longer administratively approve any payments to property owners for damages to their properties.

As a consequence of the above position, the court action to which the Norrises refer was filed by several property owners, and the suit was tried in the Federal District Court in Mobile in April of 1977. In this suit, the owners claimed that the erosion damage to their property was attributable to the Corps construction of navigational facilities in the form of training jetties on the Alabama River. The property owners were represented by counsel, and the proceedings were presided over by Judge Brevard Hand. On the basis of testimony introduced to the court by the contending parties, the court generally found that the evidence presented did not conclusively establish that the bank sloughing was totally the result of the Corps' construction actions, as the affected properties were subject to frequent flooding under natural conditions, which was a contributing factor to the erosive actions along the river bank. The court held that the damages were of a consequential nature and the Government was not liable therefor.

Notwithstanding the above, this office during the early part of this year investigated the possibility of whether additional dike construction downstream and on the opposite bank of the river from the existing dikes (as a possible means of reducing the sloughing action by reorientation of the channel) might be economically justified on the basis of improving channel alignment for navigation and reducing repetitive dredging costs in this reach of the river. We were exploring the feasibility of this action, since in view of the finding in the court proceedings relieving the Corps of any direct responsibility for property damages, any action by the Corps to improve the erosion situation at Eureka Landing would have to be related to a benefit flowing to the Government such as a reduction in our operational costs or the achievement of an improved channel alignment.

An extensive hydrographic survey was made of the river in the vicinity of Eureka Landing as well as an in-depth analysis of past dredging costs as part of our overall study to determine whether the additional dike construction might be justified. While the construction of additional dikes could have conceivably provided a corollary benefit in the mitigation of the erosive action being experienced at Eureka Landing, we informed the property owners that there could be no categorical assurance that the dikes would materially relieve the sloughing situation. While our studies concluded that there would be some advantage inuring to navigation and that some reduction in maintenance costs could be expected, these positive contributions to project operation and maintenance activities would not be sufficient to justify the cost of the dike construction.

In view of the above, it would appear that any form of corrective action in the nature of physical protection or payment of damages to affected property owners would have to be specifically authorized by the Congress. Because of the advanced state of the erosion on the Eureka Landing properties, we feel that any physical correction action under specific congressional authorization would be limited to some form of dike construction as mentioned above, but we reiterate that no strong assurance could be given that such action would be an effective solution. Too, the economics of such a scheme could be questionable, since its cost, no doubt, would exceed the present fair market value of the properties currently subjected to the erosive action. The moderate benefits to be gained, however, from improvement of navigation and reduction of maintenance dredging costs would, in our opinion, justify the favorable consideration of this plan by the Congress as a possible cost effective solution. The precipitous nature of the banks precludes any direct protection, such as by placement of riprap, since the earthwork required in moderating slope gradients conducive to application of the riprap material would, in most instances, destroy the utility of the building lots. Moreover, its cost would unquestionably be prohibitive.

If you desire additional information concerning this matter, it will be promptly furnished upon request.

Sincerely yours,

ROBERT H. RYAN
Colonel, [illegible]
District Engineer

Weiss/RE/2547/j1
Dovith/RE
Smith/DX
McDonald/DD
Ryan/DE

STATEMENT OF JOHN W. JONES, JR., JUDGE OF PROBATE AND EX OFFICIO CHAIRMAN, DALLAS COUNTY (ALA.) COMMISSION

The Dallas County Commission supports the Coosa-Alabama River Improvement Association request for FY85 and we are a part of a collective effort to maintain and extend the waterway.

Since the Alabama River is considered an essential part of the Selma-Dallas County future transportation system it would be very beneficial to begin rehabilitation of the training dikes and modification of the dredging profile for the Alabama River channel below Clairborne.

Our plans on the river include the development of a port facility which could provide up to 250 jobs for this area if there is continued maintenance and operation of the Alabama River waterway from Mobile to Montgomery. Of course, a very important part of this is the improvement and maintenance of the Mobile port.

Lowered freight rates provided by the extension and maintenance of this waterway would be an important benefit to manufacturers and farmers of this area. Therefore they would have a better chance at the export market.

Again, let me reiterate the Dallas County Commission's support to the Coosa-Alabama River Improvement Association. We hope that you will consider this project in the FY85 budget as we think it will not only benefit this area but a large portion of this State as well.

RESOLUTION

WHEREAS there will be hearings on the fiscal year 1985 budget in Washington, D.C. on April 2, 1984; and

WHEREAS the Coosa-Alabama River Improvement Association, Inc. is requesting funding for maintaining and extending the Alabama River waterway; and

WHEREAS the extending and maintaining of the Alabama River waterway would be an intergral part of the proposed port facility in Dallas County; and

WHEREAS this proposed port facility in Dallas County could possibly provide a number of jobs for the area and lower freight rates for the manufacturers and farmers of this area making the export market more accessible to them.

NOW THEREFORE BE IT RESOLVED BY THE DALLAS COUNTY COMMISSION OF DALLAS COUNTY, ALABAMA that this Commission fully supports the Coosa-Alabama River Improvement Association, Inc. in its request for FY85 and that this Commission is a part of a collective effort to maintain and extend the Alabama River waterway.

DONE this the 19th day of March, 1984.

DALLAS COUNTY COMMISSION

John W. Jones, Jr., Chairman Ex-Officio
Deans E. Barber, Jr., Commissioner
C. Stanley Baldwin, Commissioner
W. H. Kendrick, Commissioner
Gene Norris, Commissioner

STATEMENT OF MORRIS MOATTS, EXECUTIVE VICE PRESIDENT, CHILTON COUNTY (ALA.) CHAMBER OF COMMERCE

The Chilton County Chamber of Commerce has long been in support of efforts and goals of Coosa-Alabama River Improvement Association, Inc.

We join in support of the collective effort of the Association to maintain and extend the waterway for fiscal year 1985. Particularly resume design and engineering work on the Coosa Project, which was suspended in 1983.

The federal investment would create jobs just as Federal job-training programs for jobs that may not exist in an underdeveloped region. The waterways would lower truck and rail rates by providing a competitive alternative for shippers. This would certainly open up an area of industrial development.

Thanking you in advance for your attention.

STATEMENT OF GERALD J. VICK, ROME, GA.

I will not be able to attend the hearing on FY85 Appropriations but would like to share my thoughts with you on that subject. I support the requests of the Coosa-Alabama River Improvement Association, Inc. and support the maintenance and extension of the waterway.

I would be pleased to see design and engineering work on the Coosa Project which was suspended in 1983. Being a native of the area and taking the development personally, I feel that the investment in the underdeveloped region like the Coosa Valley would strengthen the nation as a whole.

Thank you in advance for your favorable consideration fo the Association's request for FY85.

STATEMENT OF N. A. NICOLSON, MOBILE, ALA.

As a member of the Coosa-Alabama River Improvement Association, Ideal Basic Industries is pleased to appear before the Appropriations Subcommittee in support of the 1985 Budget Request for maintenance and continuing development of the Coosa-Alabama River.

Ideal Basic Industries is a Denver, Colorado, corporation whose operating subsidiaries include a Potash Division and a Cement Division.

Ideal Basic's Cement Division operates a 1,500,000 ton per year cement plant on the Theodore, Alabama, ship canal south of Mobile. The total investment in this plant exceeds $350,000,000. The plant employs 252 people.

This plant is dependent for its raw material on a limestone quarry located on the Alabama River in Monroe County, Alabama. Each year since opening the quarry in 1981 output has been increased. In 1982 output was 1,200,000 tons increasing to 1,450,000 tons. Output in 1984 is estimated to reach 2,500,000 tons.

Present employment at the quarry is 58 people.

The Alabama River is a vital link to Ideal Basic's operation. Lack of rainfall in the summer and fall months causes the river to fall well below the project depth

The Mobile District of the Army Corps of Engineers has an ongoing program of maintenance. The Corps needs funds in Fiscal Year 1985 to rehabilitate training dikes and to modify the dredging profile of the Alabama River Channel to provide year round navigation at project depth.

In 1983, it cost Ideal Basic Industries over $4,800,000 to move 1,450,000 tons of limestone to its plant or $3.19 per ton.

With an adequate depth in the Alabama River costs can be reduced to less than 2.00 per ton effecting a savings of over $1,900,000 per year in transportation.

On behalf of all users of the Coosa-Alabama River, Ideal Basic Industries urges the Sub-Committee to recommend the Fiscal Year 1985 Budget Request to fund required maintenance and development of the entire river system.

STATEMENT OF KOHN T. SANDERS, PRESIDENT, CITIZENS FEDERAL S&L ASSOCIATION, ROME, GA.

Citizens Federal Savings and Loan Association of Rome, Georgia wishes to express its wholehearted support of the objectives of the Coosa-Alabama River Improvement Association's requests for FY85 and we are part of a collective effort to maintain and extend the waterway. We recognize the future economic impact that the river navigation project could have on our local economy and monies appropriated to the Coosa-Alabama system represents a sound investment for this area.

Your committee's support will be greatly appreciated.

STATEMENT OF NICHOLAS J. BARCHIE, JR., PRESIDENT, WARRIOR & GULF NAVIGATION CO., ALABAMA

I, Nicholas J. Barchie, Jr., am President of Warrior & Gulf Navigation Company and our company is a member of the Coosa-Alabama River Improvement Association. We do support the Association's request for FY85 and are testifying as part of a regional effort to maintain and extend the waterway.

As information, we operate 27 towboats, 315 barges, and at our Chickasaw Terminal two barge drydocks and one boat drydock with an empl[illegible] of 275 people.

Due to the recessionary times and the overall weak economy, the tonnage handled in 1983 was down substantially as compared to prior years. WGN's primary business on the Alabama River involves the movement of woodpulp from Claiborne, Alabama to Mobile for export to Europe and the Far East. Based on current information, we estimate 1984's tonnage to be between 75,000 and 100,000 net tons from Claiborne. Additionally, we have made various quotations to handle other business from origins and to destinations located on the Alabama River and are optimistic will increase our tonnage participation on this river as the economy continues to rebound and improve overall.

Warrior & Gulf Navigation Company has been using the Alabama River for ten or more years. A major limitation encountered on the Alabama River is severe shoaling during the summer months wherein the draft is reduced as low as 5.5 to 6 feet, thereby restricting the loading draft of our barges and requiring a very shallow draft vessel to perform the towing; e.g. our vessel's draw 8.5 feet and cannot be used during these periods of extreme low water. Therefore, it is important that the Corps of Engineers be given the necessary funding in FY85 and FY86 to improve the lower Alabama River as a rehabilitation of the existing channel; and, improve the reliability of the channel.

Furthermore, there is continuing pressure before Congress for increased user fees, segment fees, and increased cost sharing, which we oppose as waterway users are currently paying a special tax on diesel fuel. Moreover, the waterway users' lower freight rates give the U. S. producers a better export market and thereby help the trade balance. Waterways lower truck and rail rates for goods not moved on the water by providing a competitive alternative for shippers. In the meantime, large subsidies and tax advantages continue to be given to the railroads without any cost sharing requirement. Federal investments creating new jobs are needed as much as Federal job-training programs for jobs that may not exist.

We would appreciate very much your support in this matter, when your subcommittee considers appropriating funds for the Alabama River's operation and maintenance.

STATEMENT OF W. M. HUFFMAN, PRESIDENT, JOLEY CO., ROME, GA.

Our company has recognized for many years the vast potential that lies within the scope of the Coosa-Alabama River System. Completion of the system will directly enhance the economic well-being of countless thousands of citizens.

Your Sub-Committee has looked with favor upon this program in the past and all of us closely involved are grateful. We know that you are also aware that completion of the program as rapidly as possible is in the best interest of both the government and the people.

We specifically ask that you resume design and engineering work on the Coosa Project, which was suspended in 1983. Also maintenance and operation monies for Alabama River, Allatoona, Carter's Lake, Claiborne, Jones Bluff and Millers Ferry dams and locks, and improving the Mobile Harbor.

We earnestly solicit your continued support and urge that favorable consideration to be given to the total Fiscal Year 1985 request.

STATEMENT OF BART ARNOLD, MAYOR, RAGLAND, ALA.

As Mayor of the Town of Ragland, I want to express my continued support for the Coosa-Alabama waterway project. We feel that it is very vital for the future of Ragland, the State of Alabama and the entire Southeastern United States.

It is also a proven fact that waterways will lower truck and rail rates by providing a competitive alternative for shipping. Also, studies of completed waterways such as the Arkansas and the planned Coosa project show that the returns fully justify the investment. Thanks for your consideration.

STATEMENT OF THOMAS R. TIPPY, SR., PERDUE HILL, ALA.

Alabama River Pulp Company is pleased to participate in the efforts to improve the Coosa Alabama Waterway. As the Alabama River channel is improved, we will be expanding our barging operation as much as possible to achieve lower cost transportation for our outgoing product.

We produce bleached market kraft pulp, primarily for the export market. In 1983 we barged 40,000 gross short tons of pulp to the Port of Mobile. We estimate 60,000 gross short tons will be barged during 1984. In addition to barging pulp, we are now barging 20,000 BBLS. of oil per month when the river depth is reliability maintained, this tonnage could reach 240,000 tons or more per year.

While the Alabama River has an authorized project depth of nine feet, and at this level could be sufficient for the Alabama River Pulp Company's barge movements of pulp from the Mill to the Port of Mobile, this draft historically has been available to commercial traffic for only nine months or less of the year. In illustration, during the late summer and early fall, there typically is a 100 day period of "low water" when River depths are less than eight feet which, in turn restricts usable barge drafts to about seven feet. Conversely, a "high water" period in the spring months produces swift currents on the River making naviagation, with a loaded tow, difficult on several critical and narrow bends.

The Corps' Mobile office is cognizant of the aforementioned problem facing commercial interest on the Alabama River and within their discretionary authority, has instituted studies aimed at corrective alternatives. Possible short and intermediate term solutions being evaluated include: increased regulation of water discharges at the Claiborne Lock and Dam which should partially mitigate the seasonal low water problem: modified operational procedures for the Jones Bluff and Millers Ferry projects (up-river) to capture and harness all available water flows above Claiborne; and, additional dikes and " training" structures on the lower River to further confine water-flows, thereby increasing depths in critical reaches of the waterway.

Should these alternatives prove to be ineffective in solving this long standing problem on the Alabama River, the Corps has also indicated that it may be necessary to seek funding, as to identify additional projects or authority needed from the Congress to increase the River's low-flows.

We are pleased to be located on the Alabama Waterway in Monroe County and look forward to the improvement of this vital waterway. We must all work together to conserve our energy resources in the most efficient manner possible.

We respectfully request your concurrence and recommendation of funding being sought by the Coosa-Alabama River Improvement Association for fiscal year 1985.

STATEMENT OF GEORGE F. ALFORD, JR., EXECUTIVE DIRECTOR, ALABAMA-TOMBIGBEE REGIONAL COMMISSION

I am sorry that I am unable to appear in person today before this distinguished subcommittee. However, I appreciate the opportunity to submit a statement on behalf of the Coosa-Alabama Improvement Association, Incorporated.

The Alabama-Tombigbee Regional Commission is a multi-county planning and development commission in southwestern Alabama. Its member governments include 10 counties and 46 municipalities, and a population of 225,600 residents of which 51% is Black. Our communities are small, with all but one under 7,000. Our per capita income in 1974 ranged from a low of $2,000 to a high of $2,900, considerably below the state average of $3,642. Our per family income in 1975 ranged from $3,917 to $6,028.

The major reason for construction of the Coosa River Navigation Project is to afford an opportunity for improvement of the shipment of goods, both raw materials and finished products by water. In turn, the waterways lower truck and rail rates by providing a competitive alternative for shippers. However, due to the lack of construction funds needed, this project was suspended in March, 1983. The appropriation of these funds by Congress is all that is needed to resume the design and construction work which is so badly needed on the Coosa Project.

Our state and nation are suffering from unprecedented unemployment rates. The Alabama-Tombigbee Regional Commission's region alone has an unemployment rate of 15.82%. Federal investments that create jobs are needed as much as Federal job-training programs for jobs that may not exist. This would help to alleviate the dire need for employment opportunities in our region and state. Any plans for construction should include rehabilitation of the training dikes and modification of the dredging profile for the Alabama River channel below Claiborne and the continued maintenance and operation of the Alabama River waterway from Mobile to Montgomery. It is also of paramount importance that the Mobile Harbor be maintained and improved.

Support for these projects by this Subcommittee is desperately needed. We at the Alabama-Tombigbee Regional Commission are part of a collective effort to maintain and extend the waterway. The potential this project offers our region is tremendous. We urge Congress to realize the need for and support the Coosa-Alabama River Inprovement Association's request for Fiscal Year 1985 funding.

STATEMENT OF CHRIS B. HEINZ, TATE, HEINZ, & ELLIS, INC., SELMA, ALA.

Again we appear before your committee asking for your support for the completion of our great river system, The Coosa - Alabama, which you have so graciously supported in the past. This system will not only help Alabama to build in the future but will create foreign markets so our products may be shipped at a lower price.

Thank you for serving our nation in these troublesome times. We are fortunate for having men of your calber.

I regret as I cannot attend your meeting of April 2, 1984. This will be the second meeting I have missed in over a quarter of a century.

STATEMENT OF TIM PARKER, JR., EXECUTIVE VICE PRESIDENT, PARKER TOWING CO., INC., TUSCALOOSA, ALA.

My name is Tim Parker, Jr., and I am Executive Vice President of Parker Towing Company, Inc. I wholeheartedly endorse and support the testimony of Mr. Ray Carlson, Executive Vice President of the Coosa-Alabama Improvement Association, and his request to you for adequate operational and maintenance funding for the Coosa-Alabama River system.

Parker Towing Company operates a fleet of one hundred thirty (130) hopper barges, fifteen (15) towboats and four (4) tank barges. We have been providing barge transportation service to Alabama shippers for over forty (40) years.

The Coosa-Alabama is important to the economic well being of Alabama. As an example, agricultural products, primarily soybeans, wheat and corn, move in considerable volume via the Coosa-Alabama to Mobile for export. A wide variety of items are shipped by barge on the Coosa-Alabama including not only agricultural commodities, but also iron and steel articles, petroleum and chemical products, paper and forest products, and sand and gravel, just to name a few. This diversification clearly indicates the broad economic impact that this waterway has on the health of business and commerce in Alabama.

As a member of Coosa-Alabama River Improvement Association, Inc., I respectfully request that you continue to adequately fund the operational and maintenance requirements of this river. There is a continuing need to improve the reliability of the river channel.

RESOLUTION OF ST. CLAIR (ALA.) COUNTY COMMISSION

WHEREAS, a year ago work on the Coosa-Alabama River Navigation Project was suspended; and

WHEREAS, the proposed development of the river system would create a barge channel from Mobile to Rome, GA which would lower truck and rail rates by providing a competitive alternative for shippers;

WHEREAS, studies of completed waterways such as the Arkansas, and also of the planned Coosa Project, show that the returns fully justify the investment;

NOW THEREFORE BE IT RESOLVED that the St. Clair County Commission goes on record in support of the Coosa-Alabama River Improvement Association, Inc. requests for FY85; and

FURTHER, that design and engineering work on the Coosa Project be resumed as soon as funds are available.

Adopted this 25 day of February, 1984.

STATEMENT OF G. TRUMAN WELCH, MAYOR, WETUMPKA, ALA.

Wetumpka is unique in that people who work in Montgomery profit from the existing waterway and have a real interest in extending up the Coosa River. The City of Wetumpka is very pleased that the Alabama River has already proven to be a worthwhile investment. There is also a possibility of traffic to Wetumpka by river in the very near future and the using of locks on the Coosa River that have not been used in many, many years.

Wetumpka, Alabama is the threshold of the Coosa River project and we are aware of the number of products that can be exported from the area. Once cheaper transportation is available, this can mean a great deal to the economic future of our area.

Work on the waterway projects could bring both current employment and future benefits that would help our depressed economy. We must not let short range problems interfere with our provision for future economic strength.

The City of Wetumpka has been a member of the Coosa-Alabama River Development Association for a number of years and the Association has been very effective spokesman. We are very pleased to endorse the subcommittee testimonials of the Association.

RESOLUTION OF ROME (GA.) AREA CHAMBER OF COMMERCE

WHEREAS, those counties lying within the basin of the Alabama River are experiencing continuous economic growth due to the current development program now underway on the river; and,

WHEREAS, many of the counties in the area of the Coosa River are also experiencing economic growth because of the Alabama Power Company's development program, and they feel this, too, will accelerate even faster when the Alabama-Coosa waterway is fully navigable from Mobile to Rome, Georgia; and,

WHEREAS, dynamic economic growth, increased hydropower and barge transportation facilities, a more productive way of life, as well as recreational enjoyment, are but a few of the numerous benefits that will accrue when this great river system is developed;

NOW, THEREFORE BE IT RESOLVED, that the Rome Area Chamber of Commerce approves testimony by Coosa-Alabama River Improvement Association for support of appropriations on the following projects:

a. Design and engineering work on the Coosa Project, which was suspended in 1983;
b. Rehabilitation of the training dikes and modification of the dredging profile for the Alabama River channel below Clairborne;
c. Continued maintenance and operation of the Alabama River waterway from Mobile to Montgomery;
d. Continued operation and maintenance of the upstream reservoirs and hydropower plants at Allatoona and Carters Lake in Georgia;
e. Maintenance and improvement of the Mobile Harbor.

We strongly urge appropriations representing the capability of the Corps of Engineers for Fiscal Year 1985.

Approved this 2nd day of April, 1984.

David D. Harvey

David D. Harvey, President

STATEMENT OF J. THOMAS MCKENZIE, PRESIDENT, COOSA RIVER ACTION COUNCIL

The Coosa River Action Council supports the construction of the Coosa River Navigation Project. We are a group of citizens from all walks of life in Etowah County. We see the need for and the great things that can come from the development of this river.

The Coosa River is a major part of an excellent river system which begins near Rome, Georgia, and flows down through the heart of Alabama all the way to the Gulf of Mexico. Citizens of our state have long been aware of this river's potential for providing economical water transportation.

Around the turn of the century, Captain Wm. P. Lay from Gadsden organized an effort to make effective use of this great waterway. Part of his dream was realized when hydroelectric facilities were built by Alabama Power Company. That work was completed in the sixties, but some of the earlier dams are presently being upgraded and increased in capacity.

We have seen the growth in industry along navigable rivers in other states and nations. The people of Alabama and of Etowah County, in particular, need the jobs which new industry will bring. We seek your consideration of a project which is really just finishing a job that was begun long ago. The dams already in place were planned with navigation in mind. The Corps of Engineers has the necessary plans almost complete.

We see the construction of the locks as an excellent investment in the future of our country. Our people are not looking for a handout. We want our children to be able to earn their way. Productive citizens pay taxes instead of having to depend on welfare.

We ask that you look at the development of navigation on the Coosa River in this light. Let's be "positive" about our future. This is a great opportunity to strengthen an area which is beginning to develop.

We appreciate your efforts in behalf of the waterways of our country, and ask that you keep the Coosa Project high on your list of priorities.

STATEMENT OF JOHN L. EGOLF, EXECUTIVE DIRECTOR, MONROEVILLE (ALA.) AREA CHAMBER OF COMMERCE

The Monroeville Area Chamber of Commerce of Monroeville, Alabama supports the Coosa-Alabama River Improvement Association's request for FY 85 to continue the maintenance and further development of the Coosa-Alabama River System.

The Chamber is interested in the economic development of the area and we feel there will be great economic results for our area when this river system is completed. Development of this river system will ensure the maintenance and operation of the Alabama River waterway from Mobile to Montgomery and completion of the project will maintain and improve the Mobile harbor.

Studies of the completed waterways such as the Arkansas and also of the planned Coosa projects, show that the returns fully justify the investment.

STATEMENT OF CARL A. TORBERT, JR., MOBILE, ALA.

We respectfully request your consideration and approval of the following projects on the Coosa-Alabama River System for fiscal year 1985:

1) Coosa River Navigation Project.
2) Operation & maintenance - Claiborne Lock & Dam.
3) Operation & maintenance - Millers Ferry Lock & Dam.
4) Operation & maintenance - Robert F. Henry Lock & Dam.
5) Operation & maintenance - reservoirs & hydro-electric stations.
6) Operation, maintenance, improvements & deepening - Mobile Harbor.

We support the testimony of the Coosa-Alabama Improvement Association and we join in the efforts of its membership to maintain and extend the waterway to make the benefits of low cost, energy efficient water transportation available to a broader economic base.

Radcliff Materials, Inc. is one of the leading producers of construction raw materials and aggregates on the Gulf Coast. We rely extensively on the waterways of Alabama, Florida, Louisiana, Mississippi and Texas for production and delivery of our products. In 1983 we produced and moved via Alabama waterways over one million tons of sand and gravel. We also transported over 1,500,000 tons of limestone and significant quantities of other products. Our projections for 1984 are:

Sand and Gravel	1,300,000 tons
Limestone	2,000,000 tons
Other	750,000 tons.

Radcliff Materials, Inc. operates a fleet of 26 boats, 105 barges and 9 dredges. We maintain a large terminal and handling facility on McDuffie Island in Mobile, Alabama in addition to numerous support facilities throughout South Alabama and the Gulf Coast.

The maintenance of authorized project dimensions is essential for the efficient, orderly production and delivery of materials throughout the waterway system. Drought conditions in 1983 resulted in low flows on the Alabama River. Fortunately, through the efforts of the Army Corps of Engineers and their maintenance dredging program, the cooperation of users and operators on the Alabama River and a lot of luck, navigation was maintained throughout the year even though draft restrictions did limit tow capacities. This condition emphasizes the need for the Corps to have the capability of overcoming extreme conditions in meeting its assigned task of operating and maintaining an efficient, orderly waterway system. In order to provide this capability, it is imperative not only that the Army Corps of Engineers be provided with the appropriations as per their budget requests, but also with the additional funds required to insure the Corps has the flexibility and capability to fully realize the potential of the Coosa-Alabama River System and the Port of Mobile.

We sincerely appreciate the Committee's faith in the future of the great waterway systems of the State of Alabama and welcome its continued support of these vital projects.

LETTER FROM FRED L. HUGGINS, CHAIRMAN, CLARKE COUNTY (ALA.) COMMISSION

February 22, 1984

Honorable Mark Hatfield, Chairman
Subcommittee on Appropriations for
Energy and Water Development
United States Senate
Washington, D. C. 20510

Dear Mr. Chairman:

The purpose of this letter is to re-affirm the continued support of the Clarke County Commission for the Coosa-Alabama River Improvement Association and their efforts to maintain, upgrade and construct the Coosa-Alabama river system in Alabama.

Much maintenance, dredging and rehabilitation is needed on the Coosa-Alabama system. We also need to resume the design and engineering work on the Coosa river, looking toward making the Coosa river navigable all the way toward Rome, Georgia.

We, the Clarke County Commission, therefore, request that FY85 appropriations be made available for the work needed on the Coosa-Alabama river system.

Sincerely,

Fred L. Huggins
Fred L. Huggins
Judge of Probate and Chairman

STATEMENT OF MACK O. MCWHORTER, CHAIRMAN, MONTGOMERY COUNTY (ALA.) COMMISSION

The Montgomery County Commission continues to closely follow the development of the Coosa-Alabama River project which was originally authorized by the Congress in 1945. We believe that the benefits which accrue to the citizens of this region and to the nation fully justify the complete construction and operation of this economical waterway.

We fully support the testimony provided by the Coosa-Alabama River Improvement Association. For many years this group has represented us and they accurately reflect our feelings of support for this waterway project.

Of particular interest to us is the appropriation for the operation and maintenance of the Alabama River waterway, including the locks and dams at Claiborne, Millers Ferry and Robert F. Henry.

Also, we feel that the requested appropriation to begin the rehabilitation of the training dikes and modification of the dredging profile for the Alabama River channel below Claiborne is essential for the continuity of this project.

We urge your favorable consideration of the recommended appropriations. Adequate funding as requested is necessary to insure that progress is made for further development of the system and to properly operate and maintain the existing portion. Similar information has been sent to Hon. Tom Bevill, Chairman, House Subcommittee on Appropriations for Energy & Water Development, regarding this matter.

STATEMENT OF SID WILLINGHAM, ROME, GA.

The writer again appeals to your committee to look with favor on the appropriations being requested for the fiscal year of 1985 for the Alabama-Coosa River System. I have been interested in this project for a number of years, coming to Washington each year, at my own expense, to attend the hearings with the group representing Coosa-Alabama River Improvement Association, Inc. Your help in the past has always been appraciated and one of the main reasons for the project being completed to north of Montgomery and hope that before too many years pass, this will extend all the way to Rome, Georgia.

It is my opinion that maintaining an efficient waterway system can help a sick economy and work in the projects will bring back employment and future benefits and a good return on the investment according to the 1979 Benefit to cost of 1.9 to 1 based on 2 million tons and as we add new limestone shipments, etc. the ratio increases.

Thanking you for your consideratiton and hope to see you on April 2.

STATEMENT OF CHARLES W. ROE, PRESIDENT, GREATER GADSDEN (ALA.) CHAMBER OF COMMERCE

Mr. Chairman: I am Charles W. Roe, President of the Baptist Memorial Hospital in Gadsden, Alabama. I come today to testify as President of our Greater Gadsden Chamber of Commerce. I have attended these hearings before and I appreciate the work of the members of this subcommittee on behalf of our nation's waterways.

Let me say, first, that we endorse the testimony of the Coosa-Alabama River Improvement Association for operations and maintenance funds for Fiscal Year 1985. The installations that are already in place are bringing an excellent return, both in transportation savings and sale of electrical power. We are fortunate that our predecessors were builders. They had the foresight to create both public and private facilities, such as the Alabama Power Company generators on the Coosa River. It isn't for a lack of power that our region has been slow to develop.

Next, let me underscore what has been said about the need to proceed with the Coosa River Navigation Project. Even though there has been a suspension of work, we have not lowered our sights. I can assure you the economy of our area needs the kind of long range stimulus that a developed waterway would bring. Our community, Gadsden, had an average monthly unemployment rate of 17.5% in 1983, the highest among the eight MSA's (Metropolitan Statistical Areas) in our State.

We have not been standing still in the Gadsden Chamber. The name of our industrial arm, the Etowah Expansion Association indicates that we are working to expand our economic base, both qualitatively and in number of jobs. Another arm of the Chamber is the Coosa River Action Council. This group was organized a few years ago to complement the work of the Improvement Association and provide a vehicle for local emphasis. We need this in the community which probably stands to gain the most from the authorized barge channel.

I speak for the Gadsden community when I urge you to keep the Coosa River Navigation Project high on the list of possibilities for investment in our nation's future.

RESOLUTION OF ETOWAH COUNTY (ALA.) MAYORS ASSOCIATION

WHEREAS, the Etowah Mayors Association, Etowah County, Alabama is deeply concerned with economic recovery for our beloved State of Alabama; and,

WHEREAS, we are vitally concerned with the well being of our citizens in Etowah County and the surrounding areas; and,

WHEREAS, we are aware that the mood today is for government to cut back on funding at the Federal, State and local level; and,

WHEREAS, we all know that funds are available for various projects; and,

WHEREAS, we are of the conviction that maintaining an efficient waterway system can help cure a sick economy in our area. That we must not let short range problems interfere with our provision for future economic strength; and,

WHEREAS, Federal investments that create jobs are needed as much Federal job-training programs for jobs that may not exist. Lowered freight rates give manufacturers and farmers a better chance at export markets. Waterways lower truck and rail rates by providing a competitive alternative for shippers. A public policy decision to invest in an underdeveloped region like the Coosa Valley would strengthen the nation as a whole. Studies of completed waterways such as the Arkansas, and also of the planned Coosa Project, show that the returns fully justify the investment.

NOW, THEREFORE, BE IT RESOLVED THAT WE, THE ETOWAH COUNTY MAYORS ASSOCIATION, do hereby request that consideration be given for funding construction money to start the Coosa River Navigation Project. Resume design and engineering work on the Coosa Project, which was suspended in 1983. Begin rehabilitation of the training dikes and modification of the dredging profile for the Alabama River channel below Claiborne. Continue maintenance and operation of the Alabama River waterway from Mobile to Montgomery. Continue operation and maintenance of the upstream reservoirs and hydropower plants at Allatoona and Carters Lake in Georgia. Maintain and improve the Mobile Harbor.

THAT WE DO HEREBY RESOLVE to send a representative to the meeting which will be held in Washington, D. C., on Monday, April 2, 1984 to give tangible evidence of our concern for this much needed project.

PASSED AND ADOPTED on this the 23rd day of February, 1984.

Honorable Sue L. Glidewell, Chairman	Mayor of Rainbow City
Honorable W. W. Burns	Mayor of Southside
Honorable Steve Means	Mayor of Gadsden
Honorable Garry Shirley	Mayor of Attalla
Honorable W. A. Smith	Mayor of Hokes Bluff
Honorable John Sewell	Mayor of Glencoe
Honorable Jerry Morgan	Mayor of Altoona
Honorable Ross C. Hopper	Mayor of Reece City
Honorable Charles Adair	Mayor of Ridgeville
Honorable Marrell Dixon	Mayor of Sardis
Honorable W. T. Scruggs	Mayor of Walnut Grove
Honorable Ed Yarbrough	Mayor of Centre
Honorable Ginger Cobia	Mayor of Cedar Bluff

STATEMENT OF MIKE HANEY, ROME, GA.

I support the association's request for FY85 and I am a part of a collective effort to maintain and extend the waterway. I would like to see the resumption of design and engineering work on the Coosa Project which was suspended in 1983. Also, I would hope that there would be a continuation of the operation and maintenance of the upstream reservoir and hydroelectric power plants at Allatoona and Carters Lake in Georgia.

RESOLUTION OF MOBILE COUNTY (ALA.) COMMISSION

WHEREAS, hearings are to be held in the United States Congress on April 2, 1984 regarding the Fiscal Year 1985 budget for Coosa-Alabama River Project; and

WHEREAS, the Mobile County Commission supports the Coosa-Alabama River Improvement Association, Inc.'s request for FY 85 funding, and wishes to participate in the collective effort underway to maintain and extend the waterway; and

WHEREAS, the Mobile County Commission is particularly interested in the continued maintenance and operation of the Alabama River Waterway from Mobile to Montgomery; and

WHEREAS, the Mobile County Commission is particularly interested in the maintenance and improvement of the Mobile Harbor; and

WHEREAS, Federal investments that create jobs are needed as much as Federal job-training programs for jobs that may not exist; and

WHEREAS, studies of completed waterways such as the Arkansas, and also of the planned Coosa Project, show that the returns fully justify the investment; therefore, be it

RESOLVED, that the Mobile County Commission joins in the collective effort underway to maintain and extend the waterway, and, thus, supports the request of the Coosa-Alabama River Improvement Association, Inc. for the Fiscal Year 1985 budget.

Adopted February 27, 1984

W. C. HELVESTON, Administrator

STATEMENT OF J. ROGER SUMNER, ROME, GA.

We are hopeful that you will favorably consider our efforts to maintain and extend Coosa Valley waterway project through adequate funding in the fiscal year 1985 appropriations bill.

It is our desire to see design and engineering work resumed. This work was suspended in 1983. I also support the continued operation and maintenance of the upstream reservoirs and hydro-plants at Allatoona and Carters Lake in Georgia.

As a manufacturer, we are constantly striving to reduce production costs and waterway transportation will lower truck and rail rates by providing a competitive alternative for shippers. Lower freight rates also give industry and farmers a better chance to compete in the export market.

Recent studies on the planned Coosa Project show that the economic returns fully justify the investment.

STATEMENT OF MARTIN H. MITCHELL, CHAIRMAN, ROME (GA.) CITY COMMISSION

On behalf of the citizens of Rome, Georgia we would like to file the following statement of support.

We believe that water based transportation is an essential and integral part of the national transportation system. It will have an increasing significance in future years because it requires less fuel and less labor per ton-mile when compared to other transportation modes.

It is our view that these projects are not an expense to this nation. They are an investment in our economic development and future.

Therefore we would like to state our support for the following activities in the Coosa-Alabama River area:

1) Resume design and engineering work on the Coosa Project, which was suspended in 1983.

2) Begin rehabilitation of the training dikes and modification of the dredging profile for the Alabama River channel below Claiborne.

3) Continue maintenance and operation of the Alabama River waterway from Mobile to Montgomery

4) Continue operation and maintenance of the upstream reservoirs and hydroelectric power plants at Allatoona and Carters Lake in Georgia.

5) Maintain and improve the Mobile Harbor.

We further feel that a public policy decision to invest in an underdeveloped region like the Coosa Valley would strengthen the nation as a whole.

On behalf of the citizens of Rome I wish to thank you in advance for your consideration of these matters.

STATEMENT OF MAURY D. SMITH, PRESIDENT, MONTGOMERY AREA CHAMBER OF COMMERCE, ALA.

As you are aware the Montgomery Area Chamber of Commerce has, since 1890, strongly supported the development of the Coosa-Alabama River System because we have always believed that such development is vital to the cultural, industrial and economic development of Alabama and the southeastern United States. Today with the rapid total development of the whole "sunbelt" area this need is greater than ever before.

Studies have been made and presented which fully justify the beliefs we have held and show the array of benefits, never before possible, which will result from the total utilization of this great river system. For without this integral transportation system the unemployment picture in this region could be even more severe.

We are well aware of and are most grateful for your strong support of this project and request that you and your committee approve the appropriations requested for the Coosa-Alabama River System for the fiscal year 1985. We will be most grateful for your continued enthusiastic support for this most worthwhile project.

STATEMENT OF OTHA LEE BIGGS, PRESIDENT, MONROE COUNTY (ALA.) COMMISSION

The Monroe County Commission, Monroe County Alabama, supports the Coosa-Alabama River Improvement Association's request for FY 1985 to continue the maintenance and further development of the Coosa-Alabama River System.

The Monroe County Commission has been a supporter of the development of this River System since the beginning of the Association, realizing the great economic benefits the development of this great River System will have when completed, not only on Alabama and Georgia but on the Southeastern Area of this nation. The Claiborne Lock and Dam is located in Monroe County Alabama, being the first dam constructed on the Alabama River, and funds are desperately needed to begin rehabilitation of the training dikes and modification of the dredging profile for the Alabama River channel below the Claiborne Lock and Dam. There are three major users of the Alabama River System located in Monroe County below the Claiborne Lock and Dam that are dependent on navigation; the Alabama River Pulp Company, The State Docks Facility at Claiborne and the Ideal Basic Industries Quarry.

The full economic impact will not be felt until the completion of this important River System from Montgomery Alabama to Rome Georgia and that is why it is so important to resume the design and engineering work on the Coosa Project which was suspended in 1983.

Your favorable consideration of the FY 1985 Appropriation requests for the Coosa-Alabama River System Project will be greatly appreciated.

STATEMENT OF LLOYD L. SUMMER, JR., PRESIDENT, NATIONAL CITY BANK OF ROME, GA.

We have already a substantial investment in the Alabama/Coosa River project, and I should like to request again that your committee recognize the vital interest our growing section of the Southeast has in this project.

The area of Alabama and Georgia served by the Coosa River depends heavily on industry and agriculture, which would be greatly stimulated by the development of the Coosa, America's largest undeveloped river basin.

I urge that you and your committee approve this most important project, which is well within the Corps of Engineers' appropriations for fiscal 1985. I would also like to request your support for the following projects:

1. Surveys - Deepening Mobile Harbor and the funding of the development dam at Dalton, Georgia
2. Advance Engineering and Design - Coosa River Navigation Project - the money for this project is needed to stay on schedule for the construction in 1984. This project is a substantial investment in the future prosperity of Alabama, the region and the nation.
3. Operation and Maintance - Georgia and Alabama River, Alatoona Lake, and Carters Lake hydropower plants in the Jones Bluff and Millers Ferry locks, dams and power plants.

Thank you for your consideration of these projects.

STATEMENT OF JASPER FIELDING, JUDGE OF PROBATE, COOSA COUNTY, ALA.

As Chairman of the Coosa County Commission, I would like to thank you for your past support of the Coosa-Alabama River Waterway Project. I would also request that you continue your efforts on our behalf in this worthwhile project.

As you are aware, the Coosa County economy is based mainly on raw wood products. Our people rely on cutting and transporting raw wood products for their income and during this period of economic unrest, there is a great need for a faster and cheaper method of getting the wood to the processing sites which are located at Childersburg in Talladega County and Prattville, Selma and Mobile.

The completion of the Coosa-Alabama Waterway would open up many jobs not only in Coosa County but in all the Coosa-Alabama river basin.

The completion of the Coosa-Alabama Waterway will prove to be the biggest economic boom this area has ever known.

Again, let me thank you for your support in this worthwhile effort.

STATEMENT OF HUGH H. KNOX, SUPERVISOR/MARINE OPERATIONS, INTERNATIONAL PAPER CO., MOBILE, ALA.

Our Company, as a corporate citizen, longtime user of the Coosa-Alabama Waterway and a member of the Coosa-Alabama River Improvement Association, is vitally concerned and interested in the continued use and development of subject waterway. In this connection, we support the Coosa-Alabama Association's request for FY85 and are testifying as part of a regional effort to maintain and extend this waterway.

Over the years, we have depended upon waterborne transportation for a significant portion of the fiber (pulpwood and chips) for use in the manufacture of paper and related products at our primary mill located in Mobile, Alabama. We now have in place a facility to begin moving sawmill waste (sawdust and bark), by barge, from sources in Wilcox and surrounding counties to our Mobile Mill for powerhouse fuel. Additionally, International Paper Company has announced this year a modernization of its Mobile Mill at a cost in excess of $300,000,000.00 justified in part on the increased movement of fiber by barge from the hardwood forests up the Alabama River. Continued maintenance dredging, lock operation, and plans to address the low water problem areas on the lower Alabama River are vital to our expanding use of this waterway.

We view with alarm the shortsighted, continuing pressures for user fees, segment fees, and increased cost sharing. Waterway users are already paying a special tax on diesel fuel while large subsidies and tax advantages continue to be given to the railroads without any cost sharing requirement. Efficient, low cost water transportation will directly contribute to a better export market as well as contribute indirectly by providing incentive for truck and rail carriers to move goods for the export market efficiently at competitive rates.

International Paper Company joins in support of, and wholeheartedly recommends to you and the members of the Subcommittee on Appropriations for Energy and Water Development, the testimony presented to you through the Coosa-Alabama River Improvement Association, Inc.

STATEMENT OF ANNA RIGAS, CHAIRMAN, FLOYD COUNTY (GA.) BOARD OF COMMISSIONERS, AND CHAIRMAN, COOSA VALLEY AREA PLANNING AND DEVELOPMENT COMMISSION

The Coosa Valley Area Planning and Development Commission, located in Northwest Georgia, is vitally concerned with, and interested in, projects on the Alabama-Coosa River System, for the completion of these projects will mean much to this great industrial area of the State of Georgia.

We support the requests of the Coosa-Alabama River Improvement Association, Inc. for Fiscal Year 1985, and we are a part of a collective effort to maintain and extend the waterway. Specifically, we are interested in the resumption of design and engineering work on the Coosa Project, which was suspended in 1983 and the continued operation and maintenance of the upstream reservoirs and hydropower plants at Allatoona and Carters Lake in Georgia.

A public policy decision to invest in an underdeveloped region would strengthen the nation as a whole. Studies of completed waterways, such as the Arkansas and of the planned Coosa River Project, show that the returns fully justify the investment.

Your thoughtful consideration of these requests would be greatly appreciated.

STATEMENT OF B. C. HORNADY, MAYOR, MONROEVILLE, ALA.

The Monroeville City Council, Monroeville, Alabama, supports the Coosa-Alabama River Improvement Association's request for FY 1985 to continue the maintenance and further developments of the Coosa-Alabama River System.

The Monroeville City Council has been a supporter of the development of this River System since the beginning of the Association, realizing the great economic benefits the development of this great River System will have when completed, not only on Alabama and Georgia but on the Southeastern Area of this nation. The Claiborne Lock and Dam is located in Monroe County Alabama, being the first dam constructed on the Alabama River, and funds are desperately needed to begin rehabilitation of the training dikes and modification of the dredging profile for the Alabama River channel below the Claiborne Lock and Dam. There are three major users of the Alabama River System located in Monroe County below the Claiborne Lock and Dam that are dependent on navigation; the Alabama River Pulp Company, The State Docks Facility at Claiborne and the Ideal Basic Industries Quarry.

The full economic impact will not be felt until the completion of this important River System from Montgomery, Alabama, to Rome, Georgia, and that is why it is so important to resume the design and engineering work on the Coosa Project which was suspended in 1983.

Your favorable consideration of the FY 1985 Appropriation requests for the Coosa-Alabama River System Project will be greatly appreciated.

STATEMENT OF PHILLIP A. SANGUINETTI, ANNISTON, ALA.

I am writing you in behalf of the Coosa-Alabama River Improvement Association, Inc., and also to give you the feeling of this part of Alabama. Although Anniston is not directly on the Coosa River, we realize the great influence that making the Coosa navigable to Rome, Georgia, would have on both Alabama and Georgia. We feel that the Association's request for FY 85 should be granted and efforts to maintain and extend the waterway should resume immediately. We should continue maintenance and operation of Alabama River waterway from Mobile to Montgomery and, further, we feel that a public policy decision to invest in an underdeveloped region like the Coosa Valley would not only strengthen Alabama and Georgia but would further strengthen the nation.

We appreciate your fine efforts in the past and hope that you will continue to be successful in furthering this most critical project. Thank you.

STATEMENT OF WILLIAM A. BANKS, ROME, GA.

I would like to request your support for FY85 which would maintain and extend the Coosa-Alabama River waterway. Many small businesses would greatly benefit from federally funded projects, such as this and allow our area to expand our economic base through the development of the Coosa-Alabama waterway. Studies of completed waterways such as the Arkansas, and also of the planned Coosa Project, show that the returns fully justify the investment.

Having first had knowledge of the Arkansas project, I can assure you the benefits far out-weigh the suspension of the design and engineering work on the Coosa Project in 1983. In addition, I urge you to continue to fund the maintenance and operation of the Alabama River waterway from Mobile to Montgomery.

We hope you will continue to show support for our region with the re-funding of the Coosa-Alabama River Project. Thank you very much.

STATEMENT OF R. B. PETTY, CHAIRMAN AND PRESIDENT, SOUTH TRUST BANK, MONTGOMERY, ALA.

I support the Coosa-Alabama River Improvement Association's request for FY85 and am part of a collective effort to maintain and extend the waterway.

I am particularly interested in the continued operation and maintenance of the Alabama River Waterway between Mobile and Montgomery. I fully believe that the development and maintenance of our waterways would provide new jobs, a competitive alternative for shippers and lower shipping rates.

I urge you to give this your strong consideration and to vote accordingly.

STATEMENT OF B. A. REYNOLDS, SELMA, ALA.

A delegation from the Coosa-Alabama Improvement Association is scheduled to appear before the House Subcommittee on Appropriations today.

It is respectfully requested that the Committee approve the following appropriations contained in the F.Y. 1985 budget to resume design and engineering work on the Coosa project which was suspended in 1983 the development of the Coosa River. This was to complete the project from Rome, Georgia to Mobile and would be a good investment for the United States as a whole; not just the area which it serves. The returns as proposed by the Corps of Engineers show that this project will more than justify this investment. Also, I feel that they have shown through studies of the Corps that Mobile harbor will become one of the largest harbors on the Gulf Coast as soon as the Tennessee/Tombigbee project is completed in 1985. You might say that the economical benefits of the Coosa-Alabama project have been clearly substantiated. The sooner construction is started, the sooner the benefits can be realized. Also, I would like to point out that waterways are most energy-efficient -- so they would benefit not only our region, but also the nation as a whole.

STATEMENT OF EMORY FOLMAR, MAYOR, MONTGOMERY, ALA.

The City of Montgomery has actively supported the development of the Alabama-Coosa River system over the years. Our citizens have seen how the river has opened the door to international markets and brought the benefits of low-cost barge transportation to the final user of such things as agricultural products, fabricated steel, and building aggregates. Our people also recognize that the full potential of the waterway will be achieved when we extend the present channel to the industrialized communities farther up the Coosa River.

We are dedicated to a balanced Federal budget and support efforts to turn our economy around. However, expenditures to maintain and extend the waterways represent an investment in the future economic strength of the nation. The returns in efficiency and productivity are part of what we need to fight inflation. Continued development of the waterway is an opportunity to invest in the future that our nation cannot afford to miss.

I add my support to the testimony of the Coosa-Alabama River Improvement Association requesting appropriations for Fiscal Year 1985.

STATEMENT OF B. H. MOONEY III, GENERAL PARTNER, MOBILEAUDIO, ROME, GA.

Our company has recognized for many years the vast potential that lies within the scope of the Coosa-Alabama River System. Completion of the system will directly enhance the economic well-being of countless thousands of citizens.

Your Sub-Committee has looked with favor upon this program in the past and all of us closely involved are grateful. We know that you are also aware that completion of the program as rapidly as possible is in the best interest of both the government and the people.

We specifically ask that you resume design and engineering work on the Coosa Project, which was suspended in 1983. Also maintenance and operation monies for Alabama River, Allatoona, Carter's Lake, Claiborne, Jones Bluff and Millers Ferry dams and locks, and improving the Mobile Harbor.

We earnestly solicit your continued support and urge that favorable consideration to be given to the total Fiscal Year 1985 request.

STATEMENT OF ETOWAH COUNTY (ALA.) COMMISSION

We, the Etowah County Commissoin would like to take this opportunity to express our wholehearted support of the Coosa River Navigation Project, and would like to see this project completed soon.

This project would give a tremendous boost to an already ailing economy in the Etowah County area. The project we feel, would aid in the transportation of our local products to foreign countries. Products such as limestone, timber, steel, tires and many agricultural products and paper goods could be transported at a lower cost.

We feel that at this time we cannot afford to miss this opportunity to invest in the future of our country's citizens and it's lands.

Thank you for your attention in this matter.

STATEMENT OF JOHN CLARK, CITY CHAIRMAN, AMSOUTH BANK, SELMA, ALA.

This is in support of the Coosa-Alabama River Improvement Association funding request for fiscal year 1985 appropriations. This community continues to support this project and remains vitally interested in its completion. The continuing construction and eventual completion will have a great economic impact on this area which currently has one of the highest unemployment rates in the country.

In discussing this project with local business associates from time to time, I can assure you that my support is representative of the collected thinking in this area as it relates to the maintenance and the completion of this project, and I hope that your committee will look upon it with favor.

STATEMENT OF DIANA SHADDAY, EXECUTIVE DIRECTOR, ROME (GA.) TOURIST AND CONVENTION COMMISSION

The Rome Tourist and Convention Commission supports and totally endorses the Coosa-Alabama River Improvement Association's requests for fiscal year, 1985.

As part of the collective effort to maintain and extend the Coosa Waterway, we have a deep interest in the revitalization of the Coosa Project which was suspended in 1983.

We in Rome are blessed with three rivers which are interstates of yesterday and allowed our community's economy to thrive. We believe that a public policy decision to invest in an underdeveloped region such as the Coosa Valley would not only strengthen our area but the nation as a whole.

Our agency is charged with economic development through tourism. The continuation of the Coosa Project is important to us as use of our rivers for pleasure and touring boats would greatly enhance the attractiveness of our area for tourism.

STATEMENT OF J. M. BARRETT, PRESIDENT, FIRST NATIONAL BANK, WETUMPKA, ALA.

As you well know the development of the Coosa-Alabama River was approved by Congress in 1945. At that time this was proclaimed one of the greatest undeveloped river systems in our great nation. For ten years this project lay dormant with no effort to secure appropriation for planning and engineering.

In 1955 the Coosa-Alabama Improvement Association, Inc. was formed by a group who could foresee the many benefits derived from making these river navigable. Twenty-eight years have passed and we have navigation from Montgomery to Mobile. Let us not stop at the half way mark.

The completion of this project would create many jobs and industrial sites. This in time would lower freight rates and give our farmers and manufacturing plants a better chance to export markets.

Our association certainly appreciates what you the members of your sub-committee have done in the past and we know that you will look favorably on our request for fiscal year 85.

STATEMENT OF J. B. STRIPLIN, PRESIDENT, BANK OF PRATTVILLE, ALA.

We would like to see funding to continue the maintenance and operation of the Alabama River waterway from Mobile to Montgomery and if any way possible, to resume the design and engineering work on the Coosa Project.

It is my understanding that emphasis is being placed on Federal job training but Federal Investment in the waterways would create needed jobs and lower freight rates.

STATEMENT OF JAMES A. PIERCE, DIRECTOR OF TRANSPORTATION, MISSISSIPPI CHEMICAL CORP.

Mississippi Chemical Corporation is a farmer-owned cooperative with corporate headquarters in Yazoo City, Mississippi. The company was formed in the late 1940's to fill a need for a year-round supply of quality fertilizers to Southern farmers at the lowest cost possible. Mississippi Chemical now has approximately 20,000 farmer/stockholders, to whom it is the major supplier of their fertilizer needs.

Mississippi Chemical strongly supports the Coosa-Alabama River Improvement Association, and through this statement wishes to add its voice to their efforts to maintain and extend this vital waterway.

In order to better serve its farmer/customers, Mississippi Chemical has established over thirty distribution facilities located on various waterways. These facilities were established for a two-fold purpose, (1) to have fertilizers stored in regional areas for ready accessibility, and (2) to have locations available to barge transportation whenever possible in order to take advantage of this low-cost transportation mode.

A storage/distribution facility was established on the Alabama River at Montgomery, Alabama in 1973. It has a storage capacity of 22,000 tons of dry, bulk fertilizers. Shipments originate at Mississippi Chemical's Pascagoula, Mississippi production facility and travel by barge to Montgomery. It is interesting to note that the rail freight rate from Pascagoula to Montgomery is over $7.00 per ton higher than the barge cost between these same points.

Maintenance of a year-round navigable channel on the Alabama River by the Corps of Engineers is of significant importance in the movement of products and their total cost. As an example, during periods of low water or when there is shoaling on portions of the river, barge loading drafts must be restricted. With smaller payloads, cost per ton rises. As an example, average loaded tonnages on a four-barge tow at various drafts would be:

5' -- 2970 tons
6' -- 3830
7' -- 4640
8' -- 5550
9' -- 6450

The per-ton cost to move a four-barge tow loaded to a five foot draft would be approximately $6.00 per ton higher than the cost to move the same tow loaded to a nine foot draft.

Shipments to Montgomery have ranged from twenty-four barges (approximately 32,000 tons) the first year of operation to a high of 37 barges (approximately 50,000 tons). Due to the economy and the sharp drop in fertilizer usage as a result of the PIK program, shipments dropped this past year to 17 barges (approximately 23,000 tons). With the changing economy and the larger anticipated agreage planting, we are confident the current year's shipments will show a substantial increase.

As is evident, the Alabama River is very important in maintaining low-cost transportation in the movement of fertilizers into the Alabama area. We are, therefore vitally interested in the funding for its continued operation and maintenance and further improvement. Your support and efforts in this regard are earnestly solicited and appreciated.

Statement of Ellis Austin, Wetumpka, Ala.

As you well know the development of the Coosa-Alabama River was approved by Congress in 1945. At that time this was proclaimed one of the greatest undeveloped river systems in our great nation. For ten years this project lay dormant with no effort to secure appropriation for planning and engineering.

In 1955 the Coosa-Alabama Improvement Association, Inc. was formed by a group who could foresee the many benefits derived from making these river navigable. Twenty-eight years have passed and we have navigation from Montgomery to Mobile. Let us not stop at the half way mark.

The completion of this project would create many jobs and industrial sites. This in time would lower freight rates and give our farmers and manufacturing plants a better chance to export markets.

Our association certainly appreciates what you the members of your sub-committee have done in the past and we know that you will look favorably on our request for fiscal year 85.

Statement of Robert E. Leak, Jr., Executive Director, Rome and Floyd County (Ga.) Industrial Development Commission

The Rome & Floyd County Industrial Development Commission is very interested in the continuation of the Coosa-Alabama River Improvement Project. We feel that the economic benefit to the entire region will out weigh the cost of the project.

As you know the Alabana River is developing as projected. The yearly increase in tonage is partial proof of this fact, we would like for the further development of the Alabama River to continue. Regional benefits will be even more evident as the project is extened thru Gadsden, Alabama and on to Rome, Georgia.

We hope you will consider this project worthy of further development.

Statement of Ralph A. Meade, President, Cherokee County (Ala.) Commission

We strongly support the Goosa-Alabama River Improvement Association, Inc.'s requests for FY85 and we are a part of a collective effort to maintain and extend the waterway. We would also like to see design and engineering work on the Coosa Project, which was suspended in 1983, resumed.

If this project could be completed, we would see lowered freight rates, and this would give manufacturers and farmers a better chance at export markets. Waterways also lower truck and rail rates by providng a competitive alternative for shippers. A public policy decision to invest in an underdeveloped region like the Coosa Valley would strengthen our nation as a whole.

Thank you for anything that you can do further on this project.

STATEMENT OF HENRY A. LESLIE, PRESIDENT, UNION BANK & TRUST CO., MONTGOMERY, ALA.

I am writing this letter on behalf of the above organization in its effort to obtain funding of the Coosa River Navigation Project as well as maintenance of the Alabama River waterway from Mobile to Montgomery.

My office on the 15th Floor of the Union Bank Building, the highest view in downtown Montgomery, overlooks the horseshoe bend in the Alabama River. In front of the window I have a map of the inland waterways of the Nation and it is my privilege to point out to visiting dignitaries, bankers, and businessmen the tremendous navigable waterway from Mobile to Montgomery. This means a great deal to Central Alabama by means of the cheap and efficient transportation. I also point out this Coosa-Alabama River Project whereby a study should continue to be made of the possibilities of making the waterways navigable to Gadsden, and then later to Rome, Georgia.

Certainly, I think it is important to the defense and economy of the country to maintain this essential waterway from Mobile to Montgomery and I certainly recommend continued study of the possibilities of making the waterway navigable on to Gadsden and later to Rome, Georgia. Such an investment would mean a tremendous return to this Coosa Valley and would strengthen the Nation as a whole.

I would hope that you sometime could come to Montgomery and let me show you this fine view from our Union Bank Building. With kindest regards, I am

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STATEMENT OF ANNA RIGAS, CHAIRMAN, FLOYD COUNTY (GA.) BOARD OF COMMISSIONERS, AND CHAIRMAN, COOSA VALLEY AREA PLANNING AND DEVELOPMENT COMMISSION

The Floyd County Board of Commissioners wish to encourage and support efforts to resume the design and engineering work on the Coosa River Navigation Project.

The operation and maintenance of the reservoirs and hydro-power plants at Allatoona and Carters Lake in Georgia are invaluable hydroelectric generating facilities to this community.

The recognition of the present and future benefits to this region and the Nation as a whole warrants funding of the project in FY 85 appropriations.

STATEMENT OF L. REGINALD MINTER, MAYOR, MILLBROOK, ALA.

I am writing with regards to the hearings being held on the Fiscal Year 1985 Budget. I strongly support the Coosa-labama River Improvement Association requests for FY85 and I am part of a collective effort to maintain and extend the waterway.

I urge the continued maintenance and operation of the Alabama River waterway from Mobile to Montgomery as well as other projects of the Association, for it has been proven that completed waterways such as the Arkansas show that the returns fully justify the investment.

Your support will be appreciated.

STATEMENT OF B. H. MOONEY, JR., PUBLISHER, ROME (GA.) NEWS-TRIBUNE

Our newspaper has recognized for many years the vast potential that lies within the scope of the Coosa-Alabama River System. Completion of the system will directly enhance the economic well-being of countless thousands of citizens.

Your Sub-Committee has looked with favor upon this program in the past and all of us closely involved are grateful. We know that you are also aware that completion of the program as rapidly as possible is in the best interest of both the government and the people.

We specifically ask that you resume design and engineering work on the Coosa Project, which was suspended in 1983. Also maintenance and operation monies for Alabama River, Allatoona, Carter's Lake, Claiborne, Jones Bluff and Millers Ferry dams and locks, and improving the Mobile Harbor.

We earnestly solicit your continued support and urge that favorable consideration to be given to the total Fiscal Year 1985 request.

STATEMENT OF HUGH H. WILLIAMSON, MAYOR, CITY OF PELL CITY, ALA.

The City of Pell City requests your support of the Coosa-Alabama River Improvement Association requests for Fiscal Year 1985. We are a part of their collective effort to maintain and extend the Coosa River Waterway.

We are particularly concerned that work be resumed on the design and engineering work on the Coosa Project, which was suspended in 1983. General preparation for industrial growth which would result from navigation on the Coosa River has been taking place in Pell City over a period of years.

It is also important to us that continued maintenance and operation of the Alabama River waterway from Mobile to Montgomery since this part of the system will be the route to Mobile Bay.

We feel strongly that a public policy decision to invest in an underdeveloped region like the Coosa Valley would strengthen the nation as a whole and studies of the planned Coosa Project show that the returns fully justify the investment.

We respectfully request that you support the program for the development of the river system and the navigation project.

STATEMENT OF ROBERT F. HENRY, JR., ROBERT F. HENRY TILE CO., INC., MONTGOMERY ALA.

The people of the Robert F. Henry Tile Company join me in supporting fully the FY85 request of the Coosa-Alabama River Improvement Association. With renewed investment by the Federal Government in the Coosa River Project this area would respond with jobs and private investment and increased tax payments.

Downstream, the Alabama River needs the government's continued attention to keep it in top shape.

We do need your help in this important work.

Senator COCHRAN. We ask you to make such summary comments from that as you would like.

Mr. Heinz, do you want to proceed with any remarks at this point?

Mr. CARLSON. Thank you.

Chris Heinz was our president last year and we did not have a correct in that. Lister Hill Proctor is our new president. I am Ray Carlson, deputy vice president of the association, and I will be pleased to introduce our new president, Lister Hill Proctor, former State senator from Alabama and also an attorney.

Mr. PROCTOR. Thank you, Mr. Chairman, Senator Stennis. Before I offer comments to my statement that has been submitted for the record, I would like to present at this time Mr. Bill Rushton who is executive assistant to Governor Wallace. We in Alabama recognize you gentlemen will be looking to the States for local support, local effort to whatever you might be able to do here at the Federal level. In that respect, we are very pleased that Governor Wallace has made certain comments and had to be in a legislative session at the current time and could not be here but, in fact, sent Mr. Bill Rushton.

At this time, we would like Mr. Rushton to comment.

Mr. RUSHTON. Thank you, Mr. Chairman, Senator Stennis, we are glad to be here on behalf of the Alabama-Coosa. I regret that Governor Wallace could not come. We had a meeting in the Governor's office this past January with Congressman Bevill and Mr. Bevill asked us to come up with two things: The State's portion of funding of Alabama-Coosa and also a change in the Alabama law which needed to be changed to do the things we wanted to do on the Alabama-Coosa. And I am here to tell you that the Governor has done both of these things.

He has committed the money, and we also have the legislation in the House now and we see no difficulty getting it out by the end of next week. I would like to read about a two-page letter to you from our Governor for the record. It has been given for the record:

LETTER FROM GOV. GEORGE C. WALLACE OF ALABAMA

It is a privilege and a pleasure to address this subcommittee along with the members of the Coosa-Alabama River Improvement Association in support of navigation on the Alabama-Coose River system. Specifically, we endorse the request of the association and its supporters for continued funding during fiscal year 1985 of navigation on the Alabama River. We wish to again express our strong support for the full-time operation and the necessary maintenance of the Alabama River Waterway.

This waterway provides a vital link into the heartland of Alabama connecting the central Alabama area to the gulf Port of Mobile and the other waterways of our national inland waterway system. This provides a dependable, safe, and cost-effective method of transportation of materials and products, both industrial and agricultural, as well as provide jobs and opportunities for many in Alabama and Mississippi.

During 1982 and 1983 there has been a steady increase in traffic on the Alabama River. This increase, at a time when traffic on many other waterways declined, indicates that this waterway has become an important factor in the economy of Alabama and the region. For example, Scott Paper Co. and Ideal Basic Industries are among the largest of the new users. They have changed their method of moving bulk materials to their Mobile plants and have made major investments in facilities, tow boats and barges, and so forth.

We support the level of funding in the President's civil works budget request for fiscal year 1985 for the various projects along the Alabama-Coosa River system with one exception. We support the association's request for funding above the budget request for the Alabama-Coosa project in the amount of $9,653,000. This funding level is an increment over and above what is needed for regular operation and maintenance expenditures. The extra funds would be used for rehabilitation work needed to improve the reliability of the 9-foot channel during dry seasons in the lower reach of the Alabama River. This work is to be accomplished over a 2-year period. We are convinced that, due to the increased use of the river, much of this work needs to be completed during the first year.

In closing, I would like to pledge my support and again express the intentions of the State of Alabama to adequately meet its responsibilities and obligations for the Alabama-Coosa project as defined by Congress. I would also like to express thanks to you and all the members of the subcommittee for your support over the years and for your assistance in ensuring adequate funding is provided for the operation and maintenance of the existing Alabama River project and the program thus far on the proposed Coosa River project. Sincerely, George C. Wallace, Governor.

Senator COCHRAN. Thank you very much, Mr. Rushton.

Mr. PROCTOR. May I summarize my remarks?

We of the Coosa-Alabama Improvement Association are delighted that Governor Wallace and Mr. Rushton have made the commitment of State funds for the Coosa project and, further, to show the support that we have locally in Alabama with this project, we are pleased that we have some sister members of our association in attendance today from the States of Alabama and Georgia. Many of these people have come up here at their own private expense to show their support and have done it in past years. We have a number of public officials from the cities and counties represented along the Coosa-Alabama River projects. We are delighted to have their support and we wanted the members of the committee to know we, too, appreciate your past support and say as far as the current or proposed funding that you have before you, the projects and the specific funding request that we are making for fiscal year 1985 and the projects located along the waterway from Mobile inland to the headquarters in Coosa River in northwest Georgia.

In all but one project we recommend the amounts contained in the civil works budget request. And to say to you, again, that we appreciate your past support and with the support that the State of Alabama has given locally, we anticipate future support from you and say in advance we are very thankful for that. Thank you for your time.

Senator MATTINGLY [presiding]. Thank you.

Mr. CARLSON. It is a pleasure for us to have you come to the chair this hearing. We had a very fine group from Rome, Ga., with us here this morning. Our delegation that Mr. Proctor referred to consists of three heads of county government, eight county commissioners, we had three mayors, and nine city councilmen.

Also we have the president of the Coosa River Action Council. They may have had to go. We have some people catching airplanes this afternoon. So we are not able to have all of them here this afternoon. We are very pleased this delegation has shown to much enthusiasm for this. We are not asking this year for money on the Coosa project.

Timing doesn't seem to be right but we do have a final spokesman, our vice president from Alabama, Mrs. Mary George Waite, who will tell you our feelings about the Coosa project.

Mrs. WAITE. Thank you so much, Mr. Chairman. Senator Stennis, it is always great to see you, just a delight to be back in this particular committee meeting and we just want to thank you for consideration that you have given to us down through the years. One of these years, we are going to get on that boat in Rome, Ga., and come close to Center, Ala., where I live and go on down to the Port of Mobile.

Senator MATTINGLY. I would like to note in my office I have a model that is supposed to be used. We appreciate your testimony.

Senator Stennis, do you have any further comments?

Senator STENNIS. Thank you very much. I, again, express my delight in being able to be here and to visit with you again. We will follow it up. We will follow it up, get in the books here and dig up some money somewhere. I personally know the worth of a number of these projects. We will stay with it and look forward to you coming back next year.

Senator MATTINGLY. Take care of the Georgia side.

BLACK WARRIOR-TOMBIGBEE WATERWAY

STATEMENTS OF:

OFFA NICHOLS, PRESIDENT, WARRIOR-TOMBIGBEE DEVELOPMENT ASSOCIATION

BUDDY BROWNING, DIRECTOR OF TRAFFIC, ALABAMA STATE DOCKS

Senator MATTINGLY. Our next witness is Offa Nichols. Mr. NICHOLS. I am Offa Nichols, president of the Warrior-Tombigbee Development Association. You have met Mr. Rushton. On my left is Sheldon Morgan, president of the association; Buddy Browning from the Alabama State Docks. Mr. John McCarron, Ryan-Walsh Stevedoring Co., who is chairman of the port committee. I would like to begin by deferring to Mr. Rushton who will make a statement from the Governor's Office.

Senator MATTINGLY. Go right ahead.

LETTER FROM GOV. GEORGE C. WALLACE OF ALABAMA

Mr. RUSHTON. Mr. Chairman, I will take just a couple of minutes to read the letter in its entirety:

"I want to thank you for the opportunity to address this subcommittee today along with my fellow Alabamians in support of the Black Warrior-Tombigbee Waterway. I am pleased to state our strong and continued support for a fully funded operation and maintenance program requested by the Corps of Engineers for the Black Warrior-Tombigbee Waterway. Also I request that you support the provision of additional funds in the survey classification which would permit the Corps of Engineers to continue the planning and engineering of the Oliver lock replacement.

"The Black Warrior-Tombigbee Waterway is the most efficient of Alabama's inland waterways. It is linked to world markets via the Port of Mobile, and in 1985 will be linked to all of mid-America and the

Great Lakes via the Tennessee-Tombigbee Waterway. During 1980, tonnage on the Black Warrior-Tombigbee increased over 1979 by over 10 percent. The Black Warrior-Tombigbee Waterway provides efficient transportation for approximately 80 percent of Alabama's coals which is exported through the Alabama State docks at Mobile and for the grains shipped by farmers to Mobile from 21 Alabama and Mississippi counties. Other important commodities such as ore, steel, forest products, petroleum, chemicals, and aggregates move on the Black Warrior-Tombigbee Waterway to the gulf and the intracoastal waterway enroute to other parts of the Nation and the ports of the world.

"We support the Corps of Engineers' request for $12.9 million for the regular operations and maintenance (O&M) program of this waterway. We understand that $3.5 million of the $12.9 million is designated for initiating a new program to improve channel efficiency and reduce regular O&M in future years. We believe that $12.9 million is inadequate for the normal O&M program and request that the $3.5 million for this new program be added to the budget item giving a total of $16.4 million. Tonnage has grown from 8 million tons in 1966 to 16.8 million tons in 1980, greatly exceeding the original conservative estimates of the Corps of Engineers. It is vital to the region and the Nation that this waterway continue full-time operation.

"Also, additional funds need to be provided to the Corps of Engineers for continuation of the planning and engineering of the Oliver lock replacement. This lock, built before World War II, is substandard in design and dimension compared to the other five locks which were completed and opened to navigation between 1954 and 1975 and meet current design standards. The Oliver locks is already a serious bottleneck on the waterway. If construction on a new lock were begun today, it would not be open before the existing lock reaches practical upper limit of tonnage capacity of 25.5 million tons. Congressionally authorized studies for modernizing the Warrior-Tombigbee are nearing completion. The replacement of the Oliver lock with a modern, standard-sized lock is the most important aspect of this study. We believe a replacement lock is economically feasible and is vital to the continued increased utilization of the waterway.

"I join with the Warrior-Tombigbee Development Association in support of these projects and confirm our continuing commitment to fulfill our part of these projects in the future. The State of Alabama has already expended millions of dollars in support of navigation on this system and will continue to provide the necessary non-Federal resources to maintain it as a viable part of the inland waterway system.

"Again, I appreciate this opportunity and thank this subcommittee for its faithful support over the years. Sincerely, George C. Wallace, Governor."

Senator MATTINGLY. Thank you.

Mr. NICHOLS. A couple of summary comments. He has pretty well covered the real content. When the Warrior-Tombigbee was being modernized, the five locks and dams we have on the system, which are now new modern standard size locks, the projections were that in 1980, there would be 8 million tons of traffic generated on this new waterway. There were 8 million tons of traffic in 1966 and in 1980, twice the projected traffic was already moved and ongoing studies indicate that growth will continue.

U.S. Steel has recently been through very traumatic internal reorganization. As you probably know, one of the places that is not only going to remain open but further modernized is the Fairfield facility in Birmingham, Ala. There is no doubt an important part of their decision was availability of modern and efficient waterways. Some 70 percent of the output of their new $700 million pipe plant will move out of Birmingham by barge transportation.

Another thing of great interest is while we are here asking for Federal support, we are likely to identify what we are asking for as continued Federal investment. In Alabama, the Alabama State Docks, represented by Mr. Browning here, in the last 5 years has invested over $250 million for modernizing and expanding their facilities to handle waterway-related traffic. That is more money than the Federal Government has invested in building every lock and dam that exists on the Warrior-Tombigbee system today.

Private interests in the State of Alabama for the last 5 years have invested over $5.5 million in water-related activities. We are looking forward to the seed money that has produced thousands and thousands of jobs in our State of Alabama.

As has been pointed out, the Corps' budget, O&M budget, is a wee bit short because a major project they intended to initiate this year in 1985 which will in future years reduce the requirement for dredging and for O&M. We have to admit it will not help much in 1985, therefore, we are some money short. The numbers are all in the summary sheet of the testimony we have submitted. It is all well within the Corps' recorded and publicly stated capability to handle the additional funds.

OLIVER LOCK AND DAM

On Oliver lock, we know this committee does not authorize new locks. That is a separate matter, but the study for Oliver lock replacement has been approved by the Board of Rivers and Harbors. What we are asking for is enough money to keep that project, the planning for that project moving so it does not go dead and we have a solid period of 18 months while these other things happen.

MOBILE HARBOR DEEPENING

Now, Buddy Browning from the Port of Mobile.

Mr. BROWNING. Thank you.

I would like to address my remarks specifically to the Mobile Harbor. The Alabama State Dock director is out of the country, but we are submitting an official statement on his behalf and would like to ask that statement be entered into and made a part of this record.

To briefly summarize, again we are just a little bit short in fiscal year 1985. The allocated budget in the district of Mobile is $4.6 million for operation and maintenance of Mobile Harbor. We feel like that the minimum amount that the Corps is going to need is $8 million, a capability in excess of $10 million. We have not had a major dredging program in the port since Hurricane Frederick in 1979. Two reasons: Funding and a place to put the dredge. This year the Alabama State Docks will acquire a cost of $3.5 million through 11 acres. We will have that done in this calendar year and in time for the Corps to do their work in fiscal year 1985. We need work done at the bar and in the bay reaches and in the river reaches, in the ship channel turning basin.

We might tell you for the last several weeks, we have had to dock ladened vessels and vessels that were going to be loaded to certain draft stern incoming in light so they would not have to be turned in the turning basin to go out of the harbor due to the fact the turning basin is several inches up. The Corps of Engineers, Mobile district, is going to need this committee's assistance this year in helping them to provide adequate funds to do the work.

The $255 million that the department has spent in the last 7 years, the effect of that can be diluted very quickly without such channeling.

Thank you very much.

Senator MATTINGLY. Both Senator Stennis and myself are aware of the problems in the port and what has to be done. I think that is one thing Congress is trying to address now. I don't know what your position is on the new port legislation we are considering, some of which would allow moneys to come into O&M funds in those areas. We will have to wait and see how that fares in the full Congress. We appreciate your testimony.

STATEMENT OF JOHN L. McCARRON, JR., PRESIDENT, RYAN-WALSH STEVEDORING CO.

Mr. McCARRON. I am John McCarron, chairman of the Ports and Waterway Committee and the Mobile Area Chamber of Commerce. On behalf of the Mobile Area Chamber of Commerce, we certainly appreciate this opportunity to appear before this subcommittee today and offer our full statement. In the interest of time, I will not read it, but I would like to have it entered in its entirety.

Senator MATTINGLY. Without objection, it will be included in full.

[The statement follows:]

STATEMENT OF JOHN L. MCCARRON, JR., CHAIRMAN, PORT AND WATERWAY COMMITTEE, MOBILE AREA CHAMBER OF COMMERCE

GOOD MORNING GENTLEMEN:

ON BEHALF OF THE MOBILE AREA CHAMBER OF COMMERCE WE APPRECIATE THE OPPORTUNITY TO APPEAR BEFORE THIS SUBCOMMITTEE TODAY AND OFFER THIS STATEMENT IN REGARD TO FY 1985 APPROPRIATION MEASURES FOR MOBILE AREA PROJECTS.

MR. CHAIRMAN, OUR STATEMENT HERE WILL BE IN SUPPORT OF THE STATEMENT MADE BY THE ALABAMA STATE DOCKS DEPARTMENTS REPRESENTATIVE AS IT PERTAINS TO MOBILE HARBOR. THE FY 1985 BUDGET ON OPERATION AND MAINTENANCE INCLUDES $4.578 MILLION DOLLARS, WHEREAS THE APPROVED CORPS CAPABILITY IS $10.994 MILLION DOLLARS. WE RESPECTFULLY SUBMIT THAT THE BUDGETED AMOUNT OF $4.578 MILLION WILL PERMIT THE CORPS TO JUST ABOUT CONCLUDE THE DREDGING OF THE MOBILE SHIP CHANNEL IN FY 1985, BUT DOES NOT INCLUDE ANY FUNDS FOR MAINTAINING THE FOLLOWING PROJECTS:

THEODORE SHIP CHANNEL
ARLINGTON CHANNEL
CHICKASAW CREEK CHANNEL
THREE MILE CREEK

WE THEREFORE REQUEST THAT THE BUDGETED AMOUNT BE INCREASED TO THE APPROVED CAPABILITIES OF THE CORPS IN ORDER THAT PROPER MAINTENANCE OF THESE VITAL LOCAL CHANNELS MAY BE MADE.

FROM AN OPERATION AND MAINTENANCE STANDPOINT, THERE ARE SEVERAL OTHER LOCAL PROJECTS WHICH HAVE NOT BEEN BUDGETED OR UNDER- BUDGETED, BUT WHICH THE CORPS APPROVED CAPABILITIES SHOULD BE NOTED AND WE ARE LISTING THESE BELOW AS FOLLOWS:

PROJECT	AMOUNT BUDGETED	TOTAL CORPS CAPABILITY
BAYOU/CODEN CHANNEL	0	$417,000.00 (dredging)
BAYOU LA BATRE CHANNEL	0	$424,000.00 (dredging)
DAUPHIN ISLAND CHANNEL	$82,000.00	$580,000.00 (dredging)
DOG AND FOWL RIVER CHANNELS	0	$466,000.00 (dredging)

MR. CHAIRMAN, HERETO WE REQUEST THAT THE FY 1985 BUDGET BE INCREASED ON THESE PARTICULAR CHANNEL PROJECTS SO THAT THEY MAY BE PROPERLY MAINTAINED PRIMARILY FOR THE IMPORTANT COMMERCIAL FISHING INDUSTRY AS WELL AS THE SPORTS FISHING INDUSTRY OF OUR LOCAL AREA.

PRESENTLY, THE CORPS OF ENGINEERS HAS A VERY IMPORTANT ONGOING GENERAL INVESTIGATION FOR THE DEEPENING OF THE MOBILE SHIP CHANNEL FROM ITS PRESENT DEPTHS OF 40 FEET TO 55 FEET. THE FY 1985 BUDGET INCLUDES $1 MILLION DOLLARS TO CONTINUE THIS STUDY, WHEREAS THE APPROVED CORPS CAPABILITIES IS $1.8 MILLION DOLLARS. HERETO, WE REQUEST THAT THE BUDGETED AMOUNT BE INCREASED SO THAT THE CORPS CAN ACCELERATE ITS STUDY PROCESS FOR THIS MAJOR PORT IMPROVEMENT PROJECT.

ON BEHALF OF THE MOBILE AREA CHAMBER OF COMMERCE AND THE PORT OF MOBILE, I AM REQUESTING THAT THIS SUBCOMMITTEE CAREFULLY REVIEW THE BUDGETED ALLOCATION, EXAMINE THIS TESTIMONY, CONFER WITH THE MOBILE DISTRICT OF THE CORPS OF ENGINEERS FOR SUBSTANTUATION AND APPROPRIATE ADEQUATE FUNDS TO ALLOW THE CORPS TO INSTITUTE AND COMPLETE A PROPER MAINTENANCE DREDGING PROGRAM THROUGHOUT THE AREA DURING FY 1985.

AGAIN, I APPRECIATE THE OPPORTUNITY TO APPEAR BEFORE THIS SUBCOMMITTEE TODAY AND I THANK YOU FOR YOU INTEREST AND CONSIDERATION.

ADDITIONAL PREPARED STATEMENTS FOR THE RECORD

Mr. Nichols. We are also submitting some 35 statements from supporting organizations, and I hope if nothing else, we take a look at the very broad cross-section of the business community represented by those statements because every phase of the economic operation in our area of the country is represented by those statements.

I would also like to introduce the people here with us. I am sure we lost a couple to airplane flights. Let me call the names and those who are here with us, please stand.

Mr. Nich Barchie who is president of Warrior and Gulf Navigation in Mobile, Ala.; Tim Parker, executive vice president of Parker Towing, Tuscaloosa, and vice chairman of our association; Jim Ludwick from Southern Co. Services, Birmingham, Ala.; Mr. Marrion Rambeau, Mobile Area Chamber of Commerce; Mr. Walt Stevenson, who is with the State of Alabama and with Mr. Rushton.

Mr. Sheldon Morgan.

Mr. Morgan. Mr. Chairman, thank you for your time and your consideration and the support we have received from the committee each year we have come here. Thank you very much.

Senator Stennis, we thank you for what you have done for us and presided so many times. We know you have always helped us in Alabama and thank you so much.

Senator Mattingly. We appreciate you appearing today. Thank you.

[The statement follows:]

STATEMENT OF THE WARRIOR-TOMBIGBEE DEVELOPMENT ASSOCIATION

SUMMARY OF THE REQUEST

The following is a summary of the funding items for the U.S. Army Corps of Engineers for FY85 which bear on the needs of the Warrior-Tombigbee Waterway, and which we ask the Committee to approve:

Warrior-Tombigbee Waterway

Operations & Maintenance Funds, included in Corps' Budget Request	$12,853,000.
Additional Capability Funds for O&M (Dredging), not included in Corps' Budget Request	2,522,000.
Total O&M Funds Required	$15,375,000.
Additional Capability Funds for Surveys, not included in Corps' Budget Request	$2,850,000.
Total Survey Funds Required	$2,850,000.

Other needs allied to the Warrior-Tombigbee are:

Mobile Harbor

Operations & Maintenance Funds, included in Corps' Budget Request	$4,578,000.
Additional Capability Funds for O&M (dredging), not included in Corps' Budget Request	2,000,000.
Total O&M Funds Required	$6,578,000.
Survey Funds included in Corps' Budget Request	$1,000,000.
Total Survey Funds Required	$1,000,000.

We wish to highlight the items identified above as Additional Capability. Since these items were not included in the Corps' Budget Request, it is not clear to us whether the Committee has been informed of the essentiality of funding for certain of these Capabilities. We believe it essential to provide additional O&M funds if we are to have an adequate dredging and rehabilitation program; and to provide additional Survey funds to permit continued orderly and efficient planning for the modernization of the William Bacon Oliver Lock.

Written statements of support are attached.

I am Offa S. Nichols, Jr., President of the Warrior-Tombigbee Development Association. Our members represent a cross-section of agricultural and industrial activities in the Warrior-Tombigbee basin in Alabama, with additional members from eight other states. The Association was formed in 1951 to work for the redevelopment of the Warrior-Tombigbee Waterway System. Construction of the original 17 locks and dams began in the late 1870's and was completed in 1915. The navigation system provided by these locks and dams had gradually deteriorated and by the mid-1950's the annual tonnage had levelled off at

2.5 million tons due to the condition and limited capacity of the obsolete locks.

The Association's objectives have been not only the replacement of the outmoded locks and dams and improvements in the Mobile Bay area, but also the appropriation of sufficient O&M funds to support reliable navigation. Congress generally has appropriated the necessary funds to support these objectives. There are now only six locks in the 400-plus miles from the head of navigation, located northwest of Birmingham, to the Port of Mobile. During the studies which resulted in this redevelopment, it was projected that by 1980 the Waterway would carry some 8 million tons. These levels were reached in 1966, and by 1980 twice that projected tonnage was being moved on the waterway. Ongoing studies project continued growth through the 1980's and 1990's.

The Warrior-Tombigbee Waterway now has a system of modern locks and dams with the exception of one lock, William Bacon Oliver. While prior to the late 1970's the waterway had operated in a generally efficient and reliable manner, we now have a new set of circumstances. These new circumstances reflect not only the impressive growth up to now and the ravages of time and the elements, but even more the impact of world-wide energy and food needs. Some estimates indicate that 10% of our nation's coal reserves are located in the Warrior Basin. Almost 80% of the coal traffic handled by the Port of Mobile arrives there by barge from the Warrior Basin, and some 5 million tons of coal move via this waterway to the electric generating plants in our area. We have a number of large and experienced mining operations, as well as others capable of substantial growth. Farmers from twenty-one (21) Alabama and Mississippi counties ship their grain by barge to Mobile for export, and several thousand farm families are dependent on the waterway for efficient transportation of their products. In Alabama, as in the nation, their largest cash crop is soy beans. The development of these resources, the skills and experience of our people, and world-wide needs have created new demands on the waterway.

There are many other commodities moving on the waterway, such as ores, crude and fuel oils, steel products, chemicals, aggregates and wood products. Related industries, though still impacted by the world-wide recession, plan to grow and modernize. These demands require that the Warrior-Tombigbee operate at peak efficiency on a full-time basis. Operational efficiency is seriously impaired by the bottleneck caused by the one remaining substandard lock -- Oliver on the Warrior River. This pre-World War II lock is 95x460 feet and is smaller than the other five, all of which are the new standard size of 110x600 feet. This necessitates tows being broken apart and utilizing double lockages to get through. This also magnifies the need for complete efficiency and reliability of the remainder of the system.

Shipments of ore, steel and related products are expected to grow rapidly because of new and modern manufacturing facilities at U.S. Steel. The continued efficiency and completion of the modernization of the waterway were important factors in U.S. Steel's recent decision on the further modernization of its Farifield facilities. This efficiency and reliability will be significant factors in the competitiveness of these facilities. Thousands of jobs hang in the balance, critical to an area with unemployment among the highest in the nation.

Looking beyond the current depressed state of the economy, availability of the Waterway is essential to the future expansion plans of other industry. The public utilities (co-ops as well as investor owned) rely on the Waterway for increasing quantities of their fuel movements, and they may soon be moving thousands of tons of limestone to satisfy more stringent sulfur removal requirements.

Meanwhile, millions of dollars have been invested by industry, farmers and other governmental agencies, providing thousands of jobs. The Alabama State Docks' $250 million expansion and modernization program provides the most advanced coal handling technology available in this country. Similar improvements have been included for grain handling and bulk materials. It is interesting to note that the investment by this single local agency far exceeds the federal investment in building all the locks and dams on the entire waterway. During the same time period, other waterway related industry has invested some $1.5 billion. We are asking for Federal investments which pay off many fold. The waterway is essential to successful competition in world markets.

These are but examples of how this Waterway is so central to the economy of this entire area, impacting both domestic and international markets. Attached with this statement are letters from our members further highlighting this importance. I hope you will note the wide range of interests represented by these statements. Included are financial institutions; public utilities, both deep water and inland port facilities, representing both public and private ownership; coal mining, both deep and surface; manufacturers; agri-business; suppliers; constructors; and, of course, marine interests. These represent a real cross-section of the economic heartbeat of our area.

With respect to the actual funding needs, we support the Corps' request for O&M funds in the amount of $12.9 million for the Warrior-Tombigbee. We are concerned, however, that this level of funding will not support the kind of O&M program which has historically been required to keep the system reliable and efficient. This comes about because some $3.5 million of the requested funds anticipate the initiation of a channel rehabilitation program to reduce sedimentation and shoaling, thereby in future years, reducing O&M requirements. However, we must recognize that this will not reduce those requirements substantially during FY85. This means that, to support the regular O&M program, an additional $2.5 million would be required, which additional amount is well within the Corps' approved Additional Capability for the Warrior-Tombigbee.

We also note and express concern over the absence of a requested amount in the Survey funds category for the Warrior-Tombigbee. The feasibility study on the replacement of Oliver Lock is complete, and has been reported favorably by the Board of Engineers for Rivers & Harbors. It is essential that some FY85 Survey funding be made available to permit the continuation of planning for this project so as to avoid the losses and delays which will accompany the cessation of orderly and efficient planning. The Corps' approved Additional Capability in this category for this project is $2,850,000, and we request the Committee's consideration in providing this funding.

The following is a summary of the funding items which bear on the needs of the Warrior-Tombigbee Waterway, and which we ask the Committee to approve:

Warrior-Tombigbee Waterway

Operations & Maintenance Funds, included in Corps' Budget Request	$12,853,000
Additional Capability Funds for O&M (dredging), not included in Corps' Budget Request	2,522,000
Total O&M Funds Required	$15,375,000
Additional Capability Funds for Surveys, not included in Corps' Budget Request	$ 2,850,000
Total Survey Funds Required	$ 2,850,000

Other needs allied to the Warrior-Tombigbee are:

Mobile Harbor

Operations & Maintenance Funds, included in Corps' Budget Request	$ 4,578,000
Additional Capability Funds for O&M (dredging), not included in Corps' Budget Request	2,000,000
Total O&M Funds Required	$ 6,578,000
Survey Funds included in Corps' Budget Request	$ 1,000,000
Total Survey Funds Required	$ 1,000,000

We fully endorse and seek the approval of these items. I, as President of the Warrior-Tombigbee Development Association, our other Officers, our Board of Directors, and our Members, appreciate the consideration of the Chairman and Members of this Subcommittee and its staff have shown us over the years. We ask for your support once again.

We are submitting additional written statements of support, representing a cross-section of business, industry and the public.

Thank you for your consideration. We stand ready to answer questions.

WARRIOR-TOMBIGBEE DEVELOPMENT ASSOCIATION
WASHINGTON APPROPRIATIONS HEARINGS
LIST OF STATEMENTS

Alabama By-Products Corporation, Birmingham, AL.
Alabama Electric Cooperative, Andalusia, AL
Alabama Federal Savings & Loan Assoc., Jasper, AL
Alabama Power Company, Birmingham, AL
Alabama State Docks Dept., Mobile, AL
American Cast Iron & Pipe Co., Birmingham, AL
American Commercial Barge Line Co., Harahan, LA
AmSouth Bank, N.A., Birmingham, AL
Birmingham Area Chamber of Commerce, Birmingham, AL
Chicago Bridge & Iron Co., Birmingham, AL
Childress Company, Foley, AL
The Drummond Company, Jasper, AL
First National Bank, Mobile, AL
First National Bank of Tuskaloosa, Tuscaloosa, AL
Gulf Power Company, Pensacola, FL
Harbert International, Birmingham, AL
Hunt Oil Company, Dallas, TX
International Paper Company, Mobile, AL
Merchants National Bank, Mobile, AL
Mississippi Power Company, Gulfport, MS
Mobile Bar Pilots Assoc., Mobile, AL
Mobile Press Register, Mobile, AL
Parker Towing Company, Tuscaloosa, AL
Radcliff Materials, Inc., Mobile, AL
Scott Paper Company, Mobile, AL
South Central Bell, Birmingham, AL
Southern Company Services, Birmingham, AL
State of Alabama, Office of the Governor
State of Alabama, Dept. of Economic & Community Affairs
Tenn-Tom Towing Company, Mobile, AL
Thompson Tractor Company, Birmingham, AL
U.S. Steel Corporation, Fairfield, AL
Vulcan Materials, Inc., Birmingham, AL
Jim Walter Resources, Birmingham, AL
Warrior & Gulf Navigation Company, Mobile, AL

LIST OF WITNESSES

The Honorable Howell Heflin - Senator-Alabama
The Honorable Jeremiah Denton - Senator-Alabama

The Honorable Bill Dickinson - Member of Congress-Alabama
The Honorable Jack Edwards - Member of Congress-Alabama
The Honorable Ben Erdreich - Member of Congress-Alabama
The Honorable Ronnie Flippo - Member of Congress-Alabama
The Honorable Bill Nichols - Member of Congress-Alabama
The Honorable Richard Shelby - Member of Congress-Alabama

Mr. W.M. "Bill" Rushton - Director, Alabama Department of Economic & Community Affairs
Mr. Walter Stevenson - Alabama Department of Economic & Community Affairs

Mr. Sheldon L. Morgan - Chairman, Warrior-Tombigbee Development Assoc.
Mr. Tim Parker, Jr. - Vice Chairman, Warrior-Tombigbee Development Assoc.
Mr. Offa S. Nichols, Jr. - President, Warrior-Tombigbee Development Assoc.
Mr. N.J. Barchie, Jr. - President, Warrior & Gulf Navigation Co., Chickasaw, AL
Mr. E.G. Browning - Director of Traffic, Alabama State Docks, Mobile, AL
Mr. John L. McCarron, Jr. - President, Ryan-Walsh Stevedoring Co., Mobile, AL
Mr. Marrion Rambeau - Director of Industrial Development, Chamber of Commerce, Mobile, AL
Mr. Steve Still - Government Affairs, SONAT, Inc., Washington, D.C.

STATEMENT OF ROBERT M. HOPE, DIRECTOR, ALABAMA STATE DOCKS DEPARTMENT

Good day Gentlemen:

On behalf of the Alabama State Docks Department and Port of Mobile we appreciate the opportunity to appear before this Subcommittee today and offer this statement in regard to Fiscal 1985 appropriation measures relative the Mobile Harbor Area.

In September of 1979, Hurricane Frederic visited Mobile playing havoc in the area and especially at the Alabama State Docks' facilities. Large amounts of debris were deposited in the Mobile Ship Channel and Harbor area as well as several sunken vessels, and subsequent to the Hurricane the Corps of Engineers completed their last major dredging operation in the Mobile Ship Channel.

Since 1979, the Corps has maintained the Ship Channel but exercised limited dredging programs due to funds as well as an inadequate disposal area for the dredged spoil removed from the Channel.

The Alabama State Docks Department as local sponsor for the State of Alabama for the project has in the last few months completed negotiations to acquire an additional spoil disposal area and has thus far expended $600,000 and will expend by the end of the year an additional three million dollars to acquire approximately 311 acres to provide the necessary spoil disposal depository.

Subsequent to the acquisition of the properties the Corps of Engineers will have site construction responsibilities with diking procedures estimated to cost $1.3 million. Thence a full dredging program should be initiated and our historical data indicates that to provide adequate ingress and egress for the size vessels using the Port of Mobile, 3.8 million cubic yards should be removed from the Bay reaches at a cost of approximately $1.21 a yard or $4.6 million, and 1.2 million cubic yards need to be removed from the River reach at $1.90 per yard or $2.3 million.

The outer bar requires attendance with an estimated removal of 264,000 cubic yards at $4.00 a yard or in excess of one million dollars.

Due to the need for a major maintenance dredging program in the Mobile Ship Channel and Turning Basin it has become necessary for vessels entering Alabama State Docks' facilities to be docked "stern in" prior to loading because the Turning Basin at the Port has silted in to the extent that maximum loaded vessels can no longer utilize the Basin for turning procedures. At this time, there is only 34 to 36 feet of water in the Turning Basin and, of course, like the Channel it is authorized for maintenance to 40 feet. This has caused extreme logistical problems with the handling of some vessels.

Dredging work needs to be done this year in the Theodore Ship Channel and the Garrows Bend Channel which serves barge traffic totaling approximately 10,000 transit moves per year entering and exiting the Department's McDuffie Export Coal Handling Facility.

The Corps of Engineers has received a Budgeted Allocation for Fiscal Year 1985 of $4.6 million for Operation and Maintenance of the Mobile Ship Channel. This is entirely inadequate as the basic needs approach $8 million and Corps capability is in excess of $10 million.

In the last seven years the Alabama State Docks Department has expended $250 million in the renovation of existing and the construction of new facilities primarily for the handling of bulk cargoes. Maximum utilization of these facilities is now being diluted by the fact that a major Maintenance Dredging Program has not been initiated or completed in the last four years, and it is imperative that such a program be instituted during Fiscal Year 1985 now that an adequate site has been made available for containment of dredged spoil disposal.

The Budgeted Allocation for the Corps of Engineers' continued study of the Mobile Harbor Improvement Program is $1 million; however, Corps capability is $1.8 million and we feel that this will be adequate to continue the required study for the next year.

On behalf of the Alabama State Docks Department and the Port of Mobile I am requesting that this Subcommittee carefully review the Budgeted Allocation, examine this testimony, confer with the Mobile Division of the Corps of Engineers for substantiation and appropriate adequate funds to allow the Corps to institute and complete a proper Maintenance Dredging Program during Fiscal 1985.

Again, I appreciate the opportunity to appear before this Subcommittee today and I thank you for your interest and consideration.

STATEMENT OF INTERNATIONAL TRADE COUNCIL, BIRMINGHAM AREA CHAMBER OF COMMERCE

The International Trade Council of the Birmingham Area Chamber of Commerce acknowledges and stresses the importance of the Warrior-Tombigbee Waterway system to the Birmingham area economy. In the most recent reporting year, about 15 million tons was shipped on this waterway to or from the Birmingham area. These goods consisted of raw materials and petroleum and chemical products inbound and coal, grain, cast iron pipe, steel products and semi-finished manufactured goods going south to Mobile from the Birmingham area. Many of these outgoing products were involved in export trade, therefore creating a postive impact on our country's trade deficit.

The Warrior-Tombigbee Waterway's importance to the Birmingham area will increase upon the completion of the Tennessee-Tombigbee Waterway in 1985. Also, U.S. Steel's $700 million pipe mill is open and working toward full production. Water borne shipments are expected to triple as this production increases. In addition, a $100 million continuous slab caster is scheduled for construction at the Fairfield works. Birmingham is becoming one of U.S. Steel's major centers in the United States, and the availability of water borne transportation for both inbound and outbound products is of major importance in the overall plan of this manufacturing complex in our area. The Warrior-Tombigbee system provides this means of transportation.

This Council also considers the completion of the Oliver Lock project in Tuscaloosa to be of much importance to the Birmingham area, since all of our products must now go through this antiquated lock. Therefore, we strongly encourage additional monies in the proposed U.S. Corps of Engineers' budget to continue the Oliver Lock replacement planning and design activities.

Finally, the importance of both the overall waterway and the upgrading of the Oliver Lock are emphasized by the Birmingham area's port development effort.

The Birmingham Area Chamber of Commerce is working with the City of Birmingham and the Jefferson County Commission to develop a major inland public port and industrial park complex. This facility would be located somewhere on the Warrior River about 20 miles west of the City of Birmingham. An extensive feasibility study has indicated that such a project would stimulate more than $139 million in private capital investment; $60 million in construction spending; and the creation of 3,300 primary jobs and more than 6,000 secondary jobs.

STATEMENT OF CHARLES R. LOWMAN, GENERAL MANAGER, ALABAMA ELECTRIC COOPERATIVE, INC.

Alabama Electric Cooperative, Inc. (AEC) and the electric utility industry in South Alabama, Southern Mississippi and Northwest Florida generate electrical power at a lower cost as a result of the efficient and economical water transportation of fuel. This lower cost transportation is made possible by the Warrior-Tombigbee Waterway and the Port of Mobile.

In the mid-1960's AEC selected a site located at mile point 89 on the Warrior-Tombigbee Waterway for one of its generating plants (Tombigbee Plant). When AEC required additional generating capacity in the 1970's a plant siting study showed this site to be the most cost-effective location for adding additional generation. One of the major factors determining this location was the lower fuel transportation cost afforded by the Warrior-Tombigbee Waterway.

Approximately 467,000 tons of coal was transported by barge from the coal fields in Northwest Alabama via the Warrior-Tombigbee Waterway to AEC's Tombigbee Plant in 1983. The cost per ton for this movement was less than $5 compared to nearly $8 per ton for rail transportation. This is more than a 60% differential in barge versus rail transportation cost, which amounted to a lower transportation cost to AEC in excess of 1.4 million dollars.

In 1983 the transportation cost for moving coal to AEC's generating plants was approximately 6.4 million dollars which represented 5.1% of its total operating cost. Without eh efficient and reliable operation of the Warrior-Tombigbee Waterway AEC's transportation costs, which is a significant part of its operating cost, would have been even greater.

The testimony to be presented before your subcommittee by Offa S. Nichols, Jr., President, Warrior-Tombigbee Development Association is fully supported by AEC and its member systems. The efficient and reliability of the Warrior-Tombigbee River System is a result of the collective efforts by this Association. The lower transportation cost for AEC and ultimately lower electrical energy cost to AEC's member systems and their consumers has been most beneficial in a time of high unemployment. Alabama still has one of the highest rates of unemployment in the nation and the areas served by AEC's member systems is predominately rural and is still lagging behind other parts of the state and nation in economic recovery. A better opportunity for economic recovery for this area will be afforded by lower electrical energy cost.

In a preceding paragraph it was pointed out that approximately 467,000 tons of coal was moved to AEC's Tombigbee Plant via the Warrior-Tombigbee Waterway in 1983. It is projected that approximately 500,000 tons will be moved in 1984 and 1985. A site for a 1600 MW coal-fired generating plant has also been selected in Choctaw County, Alabama, and located on the Tombigbee River. One of the major factors in the selection of this site was the availability of water transportation. It is estimated that this plant will burn approximately 2.8 million tons of coal per year. In addition to the coal that will be required for this plant, it is projected that 233,000 tons per year of limestone will be needed in conjunction with the sulfur removal equipment (scrubbers). All or a major portion of the coal and limestone that will be used at this new generating plant will possibly be transported by barge on the Warrior-Tombigbee Waterway.

A power requirement study has been completed and is currently being updated to determine when the new generation will be needed. The best estimate at this time is that it will be needed sometime in the mid-1990's.

Alabama Electric Cooperative, Inc. is a generation and transmission cooperative with headquarters in Andalusia, Alabama. The member/owners of AEC are composed of sixteen rural distribution cooperatives, four municipalities and two industries that serve more than one-half million consumers in 35 counties in Central and South Alabama, and 10 counties in the panhandle of Northwest Florida. AEC supplies these members with all or a part of their wholesale electrical requirements and they inturn provide the power on a retail basis for the homes, manufacturing plants and other commercial and industrial establishments in their service area.

In addition to the Tombigbee Plant, AEC has the McWilliams Plant located at Gantt, Alabama on the Conecuh River. Unfortunately, the Conecuh River is not navigable and this plant has only rail service. Last year the Southern Railway System was granted permission by the Interstate Commerce Commission to abandon the tracks that served the McWilliams Plant. In order to maintain rail service to this plant AEC had to purchase eight miles of track and a locomotive. Prior to the abandonment coal could be moved with only a one line haul. After the abandonment there will always be a two line haul and in most cases a three line haul. This means that future transportation costs to the McWilliams Plant will be higher as a result of the abandonment. The abandonment also makes the lower cost transportation of fuel via the Warrior-Tombigbee Waterway to the Tombigbee Plant even more significant to AEC's continuing effort to supply electrical energy at the lowest possible cost to its member systems.

The first 75 MW unit was installed at AEC's Tombigbee Plant in the late 1960's and the movement of coal to this plant via the Warrior-Tombigbee Waterway commenced in 1969.

The barge unloader slip at the Tombigbee Plant is located on the back side of a 90 degree bend in the river and as a result silts-in during periods of high water. This condition normally requires the barge slip to be dredged after the spring floods. It requires four to six weeks to perform the dredging and during this time coal cannot be received by barge.

In addition to the time lost for dredging there is usually another four weeks during the year in which coal cannot be received by barge at the Tombigbee Plant due to high water and lock closures. As a result of time lost for dredging, high water, lock closures, equipment breakdown and so forth, water transportation is only available approximately 10 months out of the year to the plant.

AEC and its member systems supports the U. S. Corps of Engineers' request for funds for operation and maintenance of the Warrior-Tombigbee Waterway and the Mobile Harbor. However, as a result of the above mentioned problems limiting the time that water transportation is available for transporting coal to AEC's Tombigbee Plant--AEC strongly recommends that additional funds be made available to ensure an adequate operation and maintenance program as well as the channel improvement work, and funds should be made available to continue the orderly and efficient preparation for the replacement of the Oliver Lock.

STATEMENT OF JAMES A. JACKSON, MARKETING MANAGER, THOMPSON TRACTOR CO., INC., BIRMINGHAM, ALA.

Since the impact of an efficient waterway system is of vital importance to the Alabama economy and the customers we serve, Thompson Tractor Company and its 450 employees have a vested interest in the improved efficiency and reliability of the Warrior-Tombigbee Waterway. Specifically, Thompson Tractor Company is the Caterpillar dealer for North Alabama, and we sell and service heavy equipment, material handling equipment, and diesel engines for trucks, boats and for both prime power and stand-by applications. Our products and people can be found at work virtually anywhere materials must be moved, from coal to grain to chemicals to manufactured goods.

One of our major markets is the coal industry. Alabama coal producers have been more active in international trade in recent years as foreign markets have been developed. In 1983 about 3/4 of the 8 million tons of coal exported through the Port of Mobile arrived there by barge shipment; nearly 4000 barges of coal were processed.

Other major Alabama industries served by Thompson Tractor also depend on a cost efficient system of water transportation. Products such as grain, metallic ores, pulp, paper and paper products, and chemicals are commonly shipped via inland waterways to both domestic and foreign destinations. As export markets for Alabama products continue to grow so does the importance of water transport. And increasing export business is important as it contributes to our international balance of trade.

With respect to the specific problem of the 47 year old Oliver Lock, we strongly urge funding appropriation for continued site preparation and preliminary design. The benefits of more efficient water transport are unquestionable; one study projected that the annual economic benefits from the replacement of Oliver Lock would outweigh the cost of the project by more than a 3 to 1 ratio. Economic development and jobs for Alabamians will in large part depend on further waterway development and improvement. In fact, confidence in the waterway and its expected modernization were important in U.S.Steel's decision to reopen and make new investments at Fairfield. With new, modern manufacturing capabilities, shipments of ore, steel and related products are expected to increase significantly by 1985, and without further updating, waterway efficiency will be dramatically impacted.

Obviously, the efficient operation and continuing improvement of our inland waterway system have far-reaching implications for the Alabama economy and particularly the industries we serve. We ask that you join with us in support of the Corp's budget request for O&M for the BWT and Mobile Harbor while seeking additional funding to provide for normal operation and maintenance as well as the needed channel improvement work. Your support is also solicited in the efforts to authorize funds to continue the orderly and efficient preparation for the replacement of Oliver Lock.

In concern for the continued development of the Warrior-Tombigbee Waterway, Thompson Tractor Co., Inc. offers this statement in support of the scheduled April 2 testimony of Offa S. Nichols, President of the Warrior-Tombigbee Development Association. Realizing that our river system is energy efficient and plays a crucial role in local, national and international trade, we at Thompson Tractor Company pledge our ongoing support to its continued development.

STATEMENT OF JOSEPH M. FARLEY, PRESIDENT, ALABAMA POWER CO.

The Warrior-Tombigbee Waterway is a vital part of the foundation to the economic health of Alabama. Our state has experienced higher unemployment than most areas recently, and industrial activity has been diminished. Alabama's water transportation system is important to economic recovery and growth, and it must be efficient and well-maintained if the basic industries such as mining and heavy metals are to provide a sound economic base for the people of Alabama.

Alabama Power Company's continued interest in the Warrior-Tombigbee Waterway is two-fold. First, our business is dependent on the general economic health of the state; and, second, we are a primary user of the waterway. For nearly three decades, we have used economical water transportation to deliver coal to two of our major electric-generating plants.

Four of Alabama Power Company's seven fossil-fueled, electric-generating plants are located on the Warrior-Tombigbee Waterway system. Coal from the Warrior coal field is delivered to Plant Gorgas in Walker County and loaded onto barges for shipment to two generating plants in the southern and central parts of Alabama. The 1,525-megawatt Plant Barry in Mobile County, which began operation in 1954, is supplied primarily by the Warrior-Tombigbee Waterway, as is the 500-megawatt Plant Greene County near Demopolis. Plant Miller in Jefferson County also has barge capability.

We have two major concerns about the Warrior-Tombigbee Waterway. The pre-World War II Oliver Lock's capacity is inadequate, and this creates a bottleneck which impedes efficient operations on the river. It must be replaced. We have learned, through extensive experience, that thorough planning and maintenance are necessary to avoid expensive and unnecessary interruptions to river traffic. Adequate funds must be made available to the Corps of Engineers to maintain the waterway through dredging and other work.

Alabama Power Company received 3,118,000 tons of coal in 1983 which were transported on the Warrior-Tombigbee Water-Way. This represented 28 percent of the 11,344,000 tons used to generate electricity for our customers's use. Failure to replace Oliver Lock or to properly maintain the waterway can have a significant adverse effect on the cost of providing electric service to Alabama Power Company's over 1,000,000 customers.

Alabama Power Company supports the collective effort of the Warrior-Tombigbee Development Association, of which it is a member, to obtain the replacement of Oliver Lock and to obtain for the Corps of Engineers an adequate operations and maintenance budget which will ensure the long-term, efficient and economical viability of the waterway.

STATEMENT OF EARL B. PARSONS, JR., VICE PRESIDENT—ELECTRIC OPERATIONS, GULF POWER CO.

Gulf Power Company is an investor-owned electric utility and a member of The Southern Company serving a 7,400 square mile area of the Florida panhandle. Our Company utilizes coal for over 99 percent of its total generation requirements within Florida and consumes approximately 2.9 million tons per year. Over 95 percent of our coal deliveries in Florida are dependent upon waterway transportation.

Gulf Power currently moves approximately 1.0 million tons of coal on the Warrior River and/or through the Port of Mobile. The remainder of Gulf's coal delivered over the national river systems originates from the Southern Illinois Coal Basin vicinity and travels down the Mississippi River through the Port of New Orleans. From the ports of New Orleans and Mobile, all waterway deliveries travel via the intercoastal waterway for delivery at our Pensacola and Panama City generating plants.

As you can see from Gulf's dependence on the Warrior River and the Port of Mobile, we wholeheartedly support the need for adequate funding to properly maintain and improve operations. It is imperative that Gulf continue to receive coal shipments in order to provide continued reliable electric service at the most economical cost to our customers. We are also concerned about the future industrial growth in our service area and must be certain that adequate fuel supplies can be transported to our generating plants.

As proven by our present usage and commitment to Alabama waterways and facilities, we plan to evaluate to the fullest extent possible usage of the Warrior-Tombigbee Waterway for coal originating in the Southern Illinois Basin and to utilize this new waterway system where it is possible and economically in our favor to do so.

In summary, we are in full support of the efforts of the Warrior-Tombigbee Development Association to provide efficient and reliable waterway systems for coal delivery. We urge you to approve the Corps' O&M Budget request to provide funds to maintain the Warrior-Tombigbee Waterway and the Mobile Harbor.

Also, additional funds should be made available for planning for the timely replacement of Oliver Lock. We feel that it is not only in Gulf Power's interest to support this worthy endeavor, but also in the best interest of our nation to improve our capabilities to transport coal and other commodities from points of origin to market places.

STATEMENT OF JEROME DRUMMOND, VICE PRESIDENT, TRANSPORTATION, DRUMMOND COAL CO., ALABAMA

The following is a statement in support of improving the efficiency and reliability of the Warrior-Tombigbee Waterway and the Port of Mobile.

Drummond Coal Company was founded in 1935 by Mr. Heman Drummond who developed his first mine underground near Sipsey, Alabama. It was a drift mine, angling into a hillside from which men dug and mules hauled the bituminous Appalachian coal. Many of Mr. Drummond's customers were local people who needed coal for home heat. As his sons grew up, they joined him, and the family opened their first surface mine using small diesel shovels. Almost half a century has passed since Mr. Drummond produced his first ton of coal.

Today, Alabama is a major coal producing and exporting state. Drummond Coal Company is the largest surface coal producer, one of the largest coal exporters in the southeastern United States, and one of the top twenty noncaptive bituminous coal producers in the nation. Drummond serves metallurgical, utility, and specialty coal customers on four continents from mines in six counties in north central Alabama. Today the company is a subsidiary of Drummond Company, as is Alabama By Products Corporation, the nation's largest foundry coke producer.

Drummond Coal Company alone presently employs in excess of 1,500 people with an annual payroll of approximately $52,000,000. Alabama By-Products employs another 2,500 people with an annual payroll of approximately $80,000,000.

About 90% of the state's coal production, including most of Drummond's, comes from the Warrior Field located in north central Alabama. The Warrior Field, or Warrior Basin as it is also known, is a basin-like geological structure covering more than 3500 square miles and underlying parts of Winston, Marion, Fayette, Tuscaloosa, Cullman, Blount, Jefferson, and all of Walker County. The field is cut through by the Warrior River system which has led to the development of mines using water transport.

Alabama's system of riverways offers water transport to national and international destinations via the McDuffie Coal Terminal at the year-round Port of Mobile of Alabama's gulf coast. Barging in Alabama is a particularly good way to move coal because of the extent of Alabama's waterways and because of the coal handling facilities available.

Drummond ships this coal from five different coal loading facilities located at various points on the Warrior River system, two of which are company owned and operated. Drummond owns and operates a barge loading facility located at Milepost 354 on the Warrior River in conjunction with its Kellerman mining operation. This barge loading facility handles about 1,400,000 tons of production at the Kellerman Mine, and 2,000,000 tons of production for the Jim Walter Corporation. Another company owned barge loading facility is located at Milepost 401.5 on the Locust Fork portion of Warrior River in conjunction with Drummond's Short Creek operation. This barge loading facility has the potential to handle approximately 2,500,000 tons a year. Drummond also contracts for the barge loading of approximately 600,000 tons a year at Port Birmingham which is located at Milepost 399 on the Warrior River.

Obviously, reliance upon Alabama's efficient system of waterways has been a very integral part of Drummond Coal Company's planning and operations to date. Availability of an economical and efficient mode of transportation is important to any industry in getting the product to market; however, because of the national and international markets for coal, efficient transportation modes are even more critically important to the coal industry.

This reliance by Drummond Coal Company on the Warrior-Tombigbee System and the Port of Mobile is seriously threatened by the 1984 fiscal year budget proposals for the Corps of Engineers. Reduced operation and maintenance for the Warrior-Tombigbee would be crippling for the coal industry in Alabama. The amount requested, some $12.9 million, appears to be adequate based on experience over the past several years. BUT, in that $12.9 million is $3.5 million for a channel rehabilitation program which, while expected to reduce regular O&M requirements in the years ahead, will not help much in 1985. This leaves some $9.4 million for regular O&M, some $3.0 to $3.5 million below our normal experience.

By transporting its high quality coal product by an available and efficient waterway system, Drummond has been able to compete with other coal exporting nations in a successful manner and has contributed to reducing the current national trade deficit. Handicapping the Warrior-Tombigbee River System with reduced operation and maintenance will undoubtedly cause Drummond to lose this competitive edge. We feel that a loss of our competitive position could possibly lead to a reduction in the need for our product. Of course, this would only result in negative impacts on both our employment level and the economy of the region in general.

To date, significant delays are caused in the efficient movement of traffic on the Warrior-Tombigbee System by use of the small, pre-World War II Oliver Lock located on the Warrior River. Because this lock is able to handle only a four barge tow, this necessitates having to break down the barge configuration prior to moving through this lock which, even with a six barge tow, amounts to doubling the lockage time necessary to move through this lock. This one lock alone creates a bottleneck in the orderly flow of traffic on the Warrior-Tombigbee System. Sufficient planning funds to continue uninterrupted progress toward the replacement of Oliver Lock with a reliable standard-sized lock are needed in the fiscal 1984 budget for the Corps of Engineers.

Drummond Coal Company is a member of the Warrior-Tombigbee Development Association. We strongly support the testimony given today by Mr. Offa S. Nichols, Jr., President of the Association, and heartily endorse the collective effort of the Association to improve the efficiency and reliability of the Warrior-Tombigbee Waterway. Traffic on the waterway presently represents only a small percentage of the river's ultimate capacity; given the needed improvements to the Oliver Lock and a continued commitment to a federally constructed and maintained inland waterway system are granted. Certainly, the federal investment in the Warrior-Tombigbee River System has paid dividends many times over with the improved economic development in the area which the Warrior-Tombigbee River System serves.

STATEMENT OF WILLIAM CARR, PRESIDENT, JIM WALTER RESOURCES, INC., MINING DIVISION

The purpose of this letter is to convey our strong support of the testimony to be given by Mr. Offa S. Nichols, President of the Warrior-Tombigbee Development Association. Our corporation is engaged in the mining of coal and the Warrior-Tombigbee Waterway is of vital importance to this industry. The Warrior-Tombigbee Waterway is necessary for the economic and efficient transportation of coal to Mobile for export overseas.

Jim Walter Resources, Inc., Mining Division currently operates five coal mines in Alabama. The Mining Division employs over 3,000 people with an annual payroll exceeding $82,000,000. In the preceding five years this corporation has transported over five million tons of coal down the Warrior-Tombigbee Waterway to Mobile. In 1983 alone, this corporation transported 1,919,672 tons of coal by way of the Warrior-Tombigbee Waterway. Jim Walter Resources, Inc., No. 4 Mine and No. 5 Mine are dedicated entirely to the export market. When these mines attain maximum production we expect them to produce four million tons of coal per year. Clearly, the continued improvement of the Warrior-Tombigbee Waterway is of great importance to this industry and the economic well-being of the state of Alabama.

Due to the fact that the world coal market is becoming increasingly competitive, an economic and reliable form of coal transportation is necessary for this industry's survival. For these reasons our corporation supports the Corps of Engineers' Operations and Maintenance budget request, although we believe that additional funds are needed. These additional funds are necessary to insure channel improvement work vital for the continued usage of this waterway. Also, these additional funds are necessary to increase the capacity of the Oliver Lock and bring it into conformance with the other locks on the Warrior-Tombigbee Waterway.

We thank you for this opportunity to add our support to the objectives of the Warrior-Tombigbee Development Association.

STATEMENT OF CHARLES W. ADAIR, PRESIDENT AND CHIEF EXECUTIVE OFFICER, ALABAMA BY-PRODUCTS CORP.

It is our privilege to support the testimony to be given before your committee by Colonel Offa S. Nichols, Jr., President of the Warrior-Tombigbee Development Association. Alabama By-Products Corporation joins with this association in urging your favorable consideration of adequate appropriations for operations and maintenance and for further development to improve the efficiency of the Warrior-Tombigbee system.

Alabama By-Products Corporation is engaged in coal mining and by-product coke manufacturing in Jefferson and Walker Counties in Alabama. We now operate five underground coal mines, one surface mine, and the largest merchant foundry coke plant in the United States. We have approximately 2,400 employees. Our land holdings include 62,000 acres of property owned in fee simple, 70,000 additional acres of mineral rights only, and 8,000 acres of surface ownership. Large blocks of these lands contain coal reserves as yet undeveloped and are accessible to the Warrior River. These coal resources represent our potential for future growth in operations and employees. Our coal markets are regional, to electric utilities and industrial customers, and international, through the Port of Mobile. Our coke market is primarily national, but also includes some exports.

Our company's total coal production in 1983 was 4.3 million tons, and approximately 15% of this amount was transported on the Warrior-Tombigbee Waterway, either to utility plants or to Mobile for export. The export market is now at a low ebb, but we are hopeful that a recovery will soon occur. When it does, it will be essential that a reliable barge transportation route be available to Mobile and beyond to the world markets.

Two specific matters deserve your attention in connection with this appropriation request: (1) The request by the Corps of Engineers for $12.9 million in operations and maintenance monies appears to be inadequate. The figure includes $3.5 million for a much needed channel rehabilitation program, leaving only $9.4 million for routine operations and maintenance. This is approximately $3 to $3.5 million less than the Corps' need as demonstrated in recent years. (2) The budget contains no money for continuation of the planning on replacement of Oliver Lock. This antiquated facility must be replaced with a standard-size lock to complete the modernization of the river. It is, literally, the "weakest link," and prompt planning and action is needed.

We appreciate your interest in the Warrior-Tombigbee River System and Mobile Harbor, and your past support of efforts to develop this system and, thereby the economy of our area.

STATEMENT OF NICHOLAS J. BARCHIE, JR., PRESIDENT, WARRIOR & GULF NAVIGATION CO.

I am Nicholas J. Barchie, Jr., President of Warrior & Gulf Navigation Company. We are a member of the Warrior-Tombigbee Development Association and do support the testimony to be given by Mr. Offa Nichols as President of our Association; and in the succeeding paragraphs wish to address the profound importance the Warrior-Tombigbee Waterway and the Port of Mobile represent to our company.

Warrior & Gulf Navigation joins in a collective effort to improve the efficiency and reliability of the Warrior-Tombigbee Waterway due to lower costs, conservation of energy, and the overall importance it has on domestic and international trade; e.g. low transportation costs via water is very vital to the coal producers and farmers in Alabama to maintain competitive prices in today's world market in the movement of coal and grain.

WGN is a barge line located in Chickasaw, Alabama which operates 27 towboats and 315 barges making us one of the larger water carriers on the Warrior-Tombigbee Waterway. With the amount of equipment we operate our total annual capacity is around 10,000,000 tons. Additionally, we operate a coal handling and iron ore facility at Port Birmingham; and, at our Chickasaw Terminal two barge drydocks and one boat drydock with an employment totaling 275 people.

WGN provides barge transportation on the Warrior-Tombigbee Waterway for coal, iron ore, grain, iron and steel products (export and import), scrap, gypsum and various other bulk commodities. With the projected increases in coal consumption alone, over the next several years we anticipate major increases to materialize in our coal shipments; thereby, making an efficient waterway more important than ever before to our company and the Port of Mobile in our efforts to accommodate this additional demand. During the past couple of years our tonnage overall has been down due to the severe recession we have experienced. Moreover, with the recession subsiding we are seeing an increase in our overall tonnage; and, particularly with the recent opening of the pipe mill at Fairfield, Alabama, along with some of their steel making operation, we anticipate iron ore moving once again commencing during the second quarter of 1984, followed by finished steel products and seamless pipe.

Our company began using the Warrior-Tombigbee Waterway in 1940. During 1982, our capital investment for new equipment was approximately $20,000,000 so that we could continue to provide economic water transportation to our customers on this waterway.

The major limitations we have encountered operationally are the Oliver Lock and shoaling on the Warrior-Tombigbee, e.g. the Oliver Lock was constructed prior to World War II making it outdated and too obsolete to be efficient and reliable to accommodate today's size of tow consisting of 6 and/or 8 barges. With our larger tows we are required to make a double locking at Oliver, whereby our delay time can run as high as 12 or 18 hours awaiting our turn to lock through during these periods of heavy demand. With the projected increases of tonnage on the Warrior-Tombigbee System in the foreseeable future this bottleneck and our delay time will only increase as this lock becomes further saturated. Additionally, the Corps' current budget contains no monies to continue the Oliver Lock replacement planning. The Oliver Study is now complete, and we are awaiting final action by the Authorizing Committees. In the meantime, there is a great need for some monies to permit continued site investigation and preliminary design.

In reference to shoaling, the severity is dependent upon the length of our high water season (traditionally running from late December through April of each year) and the amount of water involved; e.g. 60 feet plus vs. 45 feet of water during a given season causes our shoaling to be more severe come spring and summer. The degree of shoaling varies from season to season thereby making it extremely difficult to determine the amount of funds required for dredging, etc. to maintain a 9 foot channel. Moreover, the Corps' Operation and Maintenace Budget request for the Black Warrior-Tombigbee System is misleading as the amount requested, $12.9 million, appears to be adequate based on experience over the past several years; however, we must consider that in the $12.9 million is $3.5 million for a channel rehabilitation program which, while expected to reduce the regular

O & M requirements in later years, will not help much in 1985, and leaves a balance of $9.4 million to cover the regular O & M, some $3.5 million below our normal experience.

In closing, we wish to state our support for the Corps' budget request for O & M for the Black Warrior-Tombigbee System and Mobile Harbor, but feel that (1) additional funds should be made available to ensure both an adequate O & M program as well as the channel improvement work, and (2) funds should be made available to continue the orderly and efficient preparation for the eventual replacement of Oliver Lock.

We respectfully solicit your wholehearted support and assistance in this matter, as your subcommittee considers appropriation of funds for these very important issues concerning the Black Warrior-Tombigbee System and Mobile Harbor.

STATEMENT OF NORMAN S. IVEY, GENERAL MANAGER AND VICE PRESIDENT, GULF COAST OPERATIONS, AMERICAN COMMERCIAL BARGE LINE CO.

I am writing on behalf of American Commercial Barge Line Company to express our concern over recent developments concerning improvements on the Warrior-Tombigbee River and the Port of Mobile, Alabama. It is my understanding that the current budget for the Corps of Engineers does not provide the minimum essential funds for dredging nor does it provide for funds to replace Oliver Locks.

As you may know, our company operates a fleet of towboats and barges over the inland rivers and canals. We provide a cost effective transportation link between Americas inland industries and our nations foreign shipping ports. One of the waterways upon which we operate is the Warrior-Tombigbee River that flows to the Port of Mobile, Alabama. Our current operation in this area includes shipments of coal from Holt, Alabama, Port Osborne and Coal Systems Dock at mile 372 in the Warrior to Gulf Port, Mississippi. We project shipments on this river system of coal and chemicals totaling over 600,000 net tons in 1984. For many years, the Warrior-Tombigbee River system was limited to four barge tows because of narrow channels, rocky bottoms, and old, inefficient locks. Recent improvements in the waterway have expanded the river to a six barge tow capacity. These improvements drastically increased our company's operating efficiency. Continued channel maintenance together with the replacement of Oliver Lock will allow our company and others to continue to provide cost efficient, reliable transportation of commodities through to the Port of Mobile. We actively support the efforts of the Warrior-Tombigbee Development Association because we feel their work is of great importance to the Port of Mobile, the Gulf region of the United States, and the country as a whole. We urge your subcommittee to carefully consider and highly credit the testimony of the Association's President Mr. Offa S. Nichols. Our company applauds the efforts currently being made by the Federal Government to reduce waste and trim the budget. We must, however, caution that the transportation links our our nation must not only remain strong, but they must continue to grow and improve to keep abreast of foreign competitors. The health of American industry depends on its ability to compete.

Reductions in the Federal Budget that fail to provide minimum essential funds for dredging of our waterways or that slow progress towards replacing outdated locks on our nations rivers would most surely be counterproductive to the goals of the present adminstration and our nations economic recovery.

If our company can be of further assistance in providing information concerning present conditions on the waterway please do not hesitate to ask.

STATEMENT OF BRUCE CHILDRESS, PRESIDENT, CHILDRESS CO., INC., ALABAMA

The Warrior-Tombigbee Waterway was built many years ago to fulfill a specific need in the modal choice of commodity transportation from the industrial city of Birmingham to the port city of Mobile, Alabama. In addition it has produced an astronomical amount of hydro-electric power and provided a measure of flood protection and recreational facilities for all of our citizens.

We are a towing company and have been operating boats on the Black Warrior-Tombigbee River, their main function being to shift barges under the unloading and loading equipment as required. We also operate two tows on the Gulf Intracoastal Waterway and its' tributaries, including the Black Warrior-Tombigbee and Chattahoochee Rivers. These tows have a maximum capacity of 118,000 barrels. We are now almost midway through the year 1984 and have been using this great waterway beyond the capability it was designed to accommodate. The requirement for electric power is ever increasing, and traffic generated by waterborne commerce is ten to fifteen years ahead of its' projected growth rate. In 1981 we moved over 931,000 barrels of oil, approximately 1,120,000 tons of coal and approximately 1,120,000 tons of scrap steel and iron ore. We are projecting for 1984 a movement of a million barrels of oil, 168,000 tons of coal and 1,680,000 tons of scrap steel and iron ore.

Let's talk Oliver Lock and Dam. When it was completed in 1939, it fulfilled the objectives required of it. Now forty-three years later, although still in operation, simply cannot accommodate effectively, the traffic the Warrior-Tombigbee has generated. We have to break our tows down to size to fit this lock, the only non standard lock on the river system. This in turn creates an increase in demurrage, a direct overhead expense, and increases the price to consumers on non productive expenditures. This causes a decrease in production and increases the cost of repairs resulting ultimately in increased unemployment. Feasibility studies, planning stages, environmental and ecology problems have been addressed and resolved, but the plain truth is, in order for the Warrior Tombigbee Waterway to become a more effective segment of the Inland Waterway System, it simply must be updated to accommodate today's traffic demands.

The production, transportation, and exporting of coal is becoming more important to our national economy everyday. It is my contention, that in order to be competitive in the World Market, we must move our products to export terminals in the least expensive method.

Our course of action is obvious. It is respectfully suggested, and requested that our elected senators and representatives use every tool at their command to strive for continual upgrading and maintenance for this very vital waterway system. We are looking specifically for a budget for the Corp of Engineers which will allow them, once again, to meet the challenge of our ever increasing demand for safe, efficient and economical waterway transportation.

We have not changed our position on this matter over the past few years.

STATEMENT OF R. A. GUTHANS, PRESIDENT, TENN-TOM TOWING, INC.

As a member and director of the Warrior-Tombigbee Development Association, as well as a daily user of the Warrior-Tombigbee Waterway, we wholeheartedly support the testimony given by the President of the Warrior-Tombigbee Development Association, Offa S. Nichols, Jr.

The importance of the waterway and its impact on, not only local, but national and international trade cannot be overemphasized. Historically, the Warrior-Tombigbee Waterway has been one of the most reliable navigation systems in the nation, but only through the continuing efforts of the Corps of Engineers' operation and maintenance program will it be able to maintain this status. If the waterway is to continue as one of the most economical and energy efficient means of transportation, it, by necessity, has to be properly maintained and controlled through its locks and dams in order to assure its reliability.

It is my understanding that the funds requested for the Corps O & M budget, some $12.9 million, includes $3.5 million for a channel rehabilitation program. Taking this into consideration this reduces the Corps regular O & M funds by $3.5 million below the normal budgeted experience. While we urge the approval of these funds as requested, we feel very strongly that additional funds should be made available so the O & M program can continue the channel improvements that are absolutely necessary for the continuing reliability of the Warrior-Tombigbee and Mobile Harbor. The continued development and growth of the Port of Mobile depends vitally on the efficiency and reliability of the Warrior-Tombigbee Waterways, which in turn connects this system with all national and international ports.

The Corps' budget does not contain any monies to continue the Oliver Lock replacement planning. Although the Oliver study is complete, additional funds are urgently needed to continue site investigation and preliminary design. These funds are necessary to continue the orderly and efficient preparation for the replacement of this sub-standard size lock.

During the past twenty-five (25) years, I have been associated with companies utilizing the Warrior-Tombigbee Waterway to transport sand, gravel, shell and petroleum products. We presently utilize the entire length of the Warrior-Tombigbee Waterway hauling petroleum products from Mobile to the Port of Birmingham, Tuscaloosa and Demopolis and return products from Tuscaloosa and other teminals along the Warrior-Tombigbee Waterway to other ports, including the ports of Mobile, Alabama, New Orleans and Lake Charles, Louisiana and Houston and Port Arthur, Texas. During 1983, we moved approximately 4.5 million barrels (700,000 tons) of petroleum products on the Warrior-Tombigbee. In order to move these quantities we must be able to rely on the Warrior-Tombigbee Waterway System daily on a year round basis. Without the constant operations and maintenance performed by the U. S. Corps of Engineers, it would not be possible for the barge traffic industry to continue to grow and provide this country with the most economical and energy efficient mode of transportation available today.

The importance and necessity of maintaining this waterway cannot be overemphasized when we consider the impact of the opening in June 1985 of the Tenn-Tom Waterway System connecting the Warrior-Tombigbee and Tennessee River Systems,and thereby opening areas which offer unlimited opportunities and advantages for all of the United States.

We appreciate the opportunity of expressing our views on the Warrior-Tombigbee Waterway System and want to thank you for your cooperation in the past and continued interest for the future of all waterways in our nation.

STATEMENT OF W. M. "BILL" RUSHTON, DIRECTOR, ALABAMA DEPARTMENT OF ECONOMIC AND COMMUNITY AFFAIRS

I appreciate this opportunity to appear before this Subcommittee today along with my fellow Alabamians in support of navigation on the Black Warrior-Tombigbee Waterway. Specifically, I endorse the request of the Warrior-Tombigbee Development Association and its supporters for continued funding of the full-time operation and maintenance of the Black Warrior-Tombigbee Waterway. Also, I support the request for additional funds in the "survey" classification which would permit the Corps of Engineers to continue the planning and engineering of the Oliver Lock replacement.

Alabama is blessed with strategically located navigable waterways. The busiest of these is the Black Warrior-Tombigbee Waterway which flows from the coal rich Warrior Basin in northwest Alabama through its industrial region around Birmingham south to the Port of Mobile. In 1985, this waterway will be linked to all of mid-America and the Great Lakes via the Tennessee-Tombigbee Waterway.

The Warrior-Tombigbee Waterway now has a system of modern locks and dams with the exception of one lock, William Bacon Oliver. While prior to the late 1970's the waterway had operated in a generally efficient and reliable manner, we now have a new set of circumstances. These new circumstances reflect not only the impressive growth up to now and the ravages of time and the elements, but even more the world-wide energy and food picture. Some estimates indicate that 10% of our nation's coal reserves are located in the Warrior Basin. Almost 80% of the coal traffic handled by the Port of Mobile arrives there by barge from the Warrior Basin, and over 4 million tons of coal move via this waterway to the electric generating plants in our area. We have a number of large and experienced mining operations in the area, as well as others capable of substantial growth. The development of these coal reserves, the skills and experience of our people, and the growing world-wide demand have created new demands on the waterways. Farmers from twenty-one (21) Alabama and Mississippi counties ship their grain to Mobile for export via the waterway. Several thousand farm families are dependent on the Waterway for efficient transportation of their products. In Alabama, as in the nation, their largest cash crop is soy beans.

There are many other commodities moving on the Waterway, such as ores, crude and fuel oils, steel products, chemicals, aggregates and wood products. Related industries, though now still impacted by the world-wide recession, plan to grow and modernize. These ever-increasing demands require that the Warrior-Tombigbee operate at peak efficiency on a full-time basis. Our operational efficiency is seriously impaired by the bottleneck caused by this one remaining substandard lock -- Oliver on the Warrior River. This pre-World War II is 95x460 feet and is smaller than the other five, all of which are the new standard size of 110x600 feet. This necessitates tows being broken apart and utilizing double lockages to get through. This magnifies the need for complete efficiency and reliability of the remainder of the system.

Shipments of ore, steel and related products are expected to more than triple by 1985 because of new and modern manufacturing facilities at U.S. Steel. The continued efficiency and modernization of the waterway were important in U.S. Steel's recent decision on the further modernization of their Fairfield facilities. This efficiency and reliability will be significant factors in the competitiveness of these facilities. Thousands of jobs hang in the balance, critical to an area with unemployment among the highest in the nation.

Looking beyond the current depressed state of the economy, availability of the Waterway is essential to the future expansion plans of other industry. The public utilities (co-ops, as well as investor owned) rely on the Waterway for over 20% of their fuel movements, and they may soon be moving thousands of tons of limestone to satisy EPA required sulfur removal requirements.

Meanwhile, millions of dollars have been invested by industry, farmers and other governmental agencies, providing thousands of jobs. The Alabama State Docks' $250 million expansion program is on schedule, and this facility now offers the most advanced coal handling technology available in this country. Similar expansion is underway for grain handling and bulk materials. The Waterway is essential to successful competition with foreign sources, particularly in the coal and grain markets. It is interesting to note that the investment by this single local agency far exceeds the federal investment in building all the locks and dams on the entire waterway. We are asking for Federal investments that pay off many fold.

We need an efficient and reliable waterway if we are to remain competitive in local, national and world markets. We can barely compete in world markets today, and would not be able to without the Warrior-Tombigbee Waterway.

I join with the Warrior-Tombigbee Development Association in support of the Corps of Engineers' request for $12.9 million for the regular operations and maintenance (O & M) program of this waterway. We believe that $12.9 million is inadequate for the normal O & M program and request that an additional $3.5 million for initiating the program to improve channel efficiency be added to the budget item giving a total of $16.4 million.

In closing, I would confirm my support and that of the Alabama Department of Economic and Community Affairs. I can assure you that the State of Alabama will continue to meet its responsibilities and obligations for this project. I appreciate the support and assistance which you and all the members of the Subcommittee have given us over the years and for insuring adequate funding is provided for the full-time operation and maintenance of the Black Warrior-Tombigbee Waterway.

STATEMENT OF CARLTON BAKER, VICE PRESIDENT, SOUTH CENTRAL BELL, ALABAMA

South Central Bell is vitally interested in the economic well-being of Alabama because the health of the economy directly affects the financial health of the company and the quality of life for our more than 10,000 Alabama employees.

So we support wholeheartedly the Warrior-Tombigbee waterway project and the Port of Mobile improvements because both projects will greatly boost this state's economy. And, as I said, a growing Alabama economy is a must for us.

Then, too, a healthy economy benefits the ratepayer by lessening our need for rate relief.

I'd also like to urge your committee to fully fund the Corps of Engineers' efforts to carry on its operations and to continue preparations for replacing the Oliver Lock.

This state has the opportunity to be one of the nation's leaders in the pace of economic development. The future is bright for everyone, if we make the right decisions now. Completion of the Warrior-Tombigbee project and its associated projects is one of those right decisions.

STATEMENT OF WILLIAM A. POWELL, JR., VICE CHAIRMAN OF THE BOARD, AMSOUTH BANK, BIRMINGHAM, ALA.

The Warrior-Tombigbee Waterway is important to Alabama and to those who use this vital transport medium. Consequently, it is important to us, since we are a statewide financial institution with 115 offices throughout Alabama, but more specifically with offices at Mobile, Tuscaloosa and Birmingham, all of these communities among others being served by the Warrior-Tombigbee system.

Colonel Offa S. Nichols, Jr., President of the Warrior-Tombigbee Development Association, is scheduled to appear before your Subcommittee on behalf of this river system. We support Colonel Nichols in his efforts to continue the maintenance and improvement of the system for its many users. Obviously, continuation requires continued expenditures of funds. We understand that the Corps of Engineers has submitted an Operations and Maintenance budget request for $12.9 million, which, while adequate, is substantially below the normal budgeted amounts, since that $12.9 million requested contains some $3.5 million for a channel rehabilitation program. The request also does not include funds for the badly needed replacement of the Oliver Lock and Dam. We know that you will give careful consideration to the needs for funds for the Warrior-Tombigbee.

This waterway system provides a lower cost, more energy-efficient transportation means to many companies and other users. We think that its continued use is vital to Alabama's economy. We further believe that it is in the best interest of producers, manufacturers, mining companies and others who ship goods on this river as well as to the ultimate users of those goods that the appropriate funding for the continuation of traffic and the growth of traffic along the Warrior-Tombigbee Waterway be made.

We appreciate your consideration.

STATEMENT OF JAMES C. LUDWIG, VICE PRESIDENT, SOUTHERN COMPANY SERVICES, INC., BIRMINGHAM, ALA.

Southern Company Services, Inc. on behalf of Alabama Power Company, Gulf Power Company and Mississippi Power Company supports the Warrior-Tombigbee Development Association and its' President in their efforts before your committee. The Southern electric system continuously uses the Warrior-Tombigbee Waterway to deliver coal to system plants and therefore, the condition of the waterway affects the economy of our service area.

Alabama Power Company, Gulf Power Company and Mississippi Power Company join with the Warrior-Tombigbee Development Association in an effort to improve the efficiency and reliability of the Warrior-Tombigbee Waterway because of the economies of water transportation and the importance of the Warrior-Tombigbee Waterway to local, national and international trade.

For the past twenty-one years these three utilities have used the Warrior-Tombigbee Waterway to transport coal to their respective electrical generating plants at Demopolis, Alabama; Mobile, Alabama; Pensacola, Florida; Panama City, Florida; and Biloxi, Mississippi. In 1983 more than 1.7 million tons of coal was transported from points along the Warrior-Tombigbee Waterway for these three electrical utilities. Gulf Power Company has also used the Port of Mobile to receive an average of 750,000 tons of coal per year since 1977. Because of the economic advantage of water transportation over other modes of transportation; the 1,248,868 customers of these three electrical utilities will be directly affected by any expenditures for maintenance and upgrading of the Warrior-Tombigbee Waterway, which will improve the waterway's efficiency and reliability. Higher costs through inefficiency or unreliability of the Warrior-Tombigbee Waterway will have a direct and adverse effect upon our customers.

It is for these reasons that a program of constant maintenance and upgrading of the Warrior-Tombigbee Waterway channels and locks is not only necessary but imperative. We support the Corp's budget request for O&M for the Warrior-Tombigbee and Mobile Harbor, but in addition, would like to see more funds made available to ensure both an adequate O&M program and continued channel improvement work.

STATEMENT OF JOHN D. CADE, CHAIRMAN, ALABAMA FEDERAL

I am writing to you to record my support for the Warrior-Tombigbee Waterway Project.

Our association has 35 branch offices located throughout the State of Alabama, some of which are in Mobile and other points along the waterway system. The current project to improve this waterway system would be of significant importance to our association because of the general economic growth and improvement it would create throughout the state. Our institution is one of the primary lenders for housing in Alabama and additional business in commerce brought into the state by this waterway system and the growth of our current businesses that depend on this system would add to the economic health of our area and to the needs for housing within the state.

On April 2, 1984, Mr. Offa S. Nichols, Jr., President, Warrior-Tombigbee Development Association and other members of this association, will make an appearance before the Appropriations Committees of the Senate and House of Representatives. I hope that you will join us in our support for the collective effort to improve the efficiency and reliability of the Warrior-Tombigbee Waterway because of lower costs, energy efficiency, importance to local, national and international trade and its importance to this state.

I would hope that you would support the Corp of Engineers budget request for operations and maintenance and for Mobile harbor but I would also hope that additional funds would be made available to insure both an adequate O & M program as well as the channel improvement work and that funds could also be made available to continue the orderly and efficient preparation for the replacement of Oliver Lock.

STATEMENT OF TIM PARKER, JR., EXECUTIVE VICE PRESIDENT, PARKER TOWING CO., INC.

My name is Tim Parker, Jr., and I am Executive Vice President of Parker Towing Company, Inc. I wholeheartedly endorse and support the testimony of Colonel Offa Nichols, President of the Warrior-Tombigbee Development Association. I join with him and other members of the Warrior-Tombigbee Development Association in efforts to improve the efficiency and reliability of the Warrior-Tombigbee Waterway.

Parker Towing Company operates a fleet of one hundred thirty (130) hopper barges, fifteen (15) towboats and four (4) tank barges. We have been providing barge transportation service to shippers on the Black Warrior-Tombigbee for over forty (40) years.

The Black Warrior-Tombigbee and Port of Mobile is not only important to my Company and industry, but it is a vital part of the economic well being of Alabama. Most of the coal exported from Alabama, through the Port of Mobile, moves to Mobile via the river. Agricultural products, primarily soybeans, wheat and corn, also move in considerable volume via the BWTB to Mobile for export. On almost any given day, you will find a wide variety of items being shipped by barge to include not only coal and agricultural commodities, but also iron and steel articles, petroleum and chemical products, paper and forest products and cement, just to name a few. This diversification clearly indicates the broad economic impact that this waterway has on the health of business and commerce in Alabama.

As a member of the Warrior Tobmigbee Development Association, I support the U.S. Army Corps of Engineer's Operations and Maintenance (O & M) budget, but I respectfully request that additional funds should be made available to insure both an adequate O & M program as well as channel improvement work, and that additional funds would be made available to continue the orderly and efficient preparation for the replacement of Oliver Lock. As I'm sure you know, Oliver Lock is one of the major bottlenecks in this country's transportation system and a replacement lock is certainly a worthy federal investment.

STATEMENT OF R. A. BURK, JR., RIVER REGION MANAGER, SCOTT PAPER CO.

Scott Paper Company appreciates the opportunity to submit a statement on our use of the Warrior-Tombigbee River system. Water transportation of raw materials is of great importance to our company and will be even more so in the future. Decisions of this Committee will therefore be very important to our company's future operation, profitability, and employee work force. Failure to provide for dredging and other projects on the Warrior-Tombigbee River system could increase our company's operating costs to the detriment of the economy of Alabama and its citizens.

Scott Paper Company in Alabama manufactures lumber, pulp and a wide variety of paper products which are shipped to markets throughout the United States. The payroll for our 4,000 employees in the Mobile, Alabama area is $108 million annually. Scott's operation in the Mobile area contributes over $1 million per day to the economy through payroll, taxes, and purchase of pulpwood and supplies.

Water transportation is used in Scott's Alabama operation to move raw material - pulpwood and logs - to manufacturing plants.

We have used water transportation of wood raw materials on the Warrior-Tombigbee River system for a number of years and are currently upgrading and enlarging our water transportation capabilities. Our $70 million dollar investment in 1982-83 has resulted in lower operating costs which, in turn, has improved the competitiveness of our Alabama operations. We are currently barging approximately 1.8 million tons of wood on Alabama's river systems to our Mobile, Alabama manufacturing plants. The $70 million investment included modernization of our Camden and riverbank woodyards and the Mobile woodyard and firststage processing equipment. We now operate five towboats and fifty-two barges. Fifty percent of our raw material is being delivered on the Warrior-Tombigbee River system. In the future, we will construct an additional upriver woodyard at Demopolis, Alabama.

With this additional $70 million investment in water transportation facilities, it is obvious that a well-maintained Warrior-Tombigbee River system is critical to our company's future. Failure of the U. S. Army Corps of Engineers to dredge and carry out other projects on the Warrior-Tombigbee River system could result in higher transportation costs and negative economic pressures on the company, the economy of Alabama, and the 4,000 Scott employees.

We urge the Committee to provide adequate funding for the Warrior-Tombigbee River system and Mobile, Alabama harbor.

STATEMENT OF CARL P. FARLOW, PRESIDENT, AMERICAN CAST IRON PIPE CO.

Speaking in behalf of my company, American Cast Iron Pipe Company, I urge you to act favorably on the Corps of Engineers' request for Operations and Maintenance funds for the Warrior-Tombigbee Waterway and Mobile Harbor. However, in our view the Corps' requested budget is inadequate and should be increased by $3.5 million in order to accommodate normal annual expense in this area. I would also urge that additional funds be made available to permit the refinement of the studies and the continuation of planning and engineering for replacement of the Oliver Lock with a reliable standard size lock.

My company exports extensively through the Port of Mobile. Our export business has expanded steadily over the last ten years, and we have made good use of the Warrior-Tombigbee Waterway. In a typical year we export approximately 40,000 tons of pipe through Mobile. We have used barges in the past and expect to use them in the future. A dependable waterway is extremely important to us. It is necessary that we move barge loads of pipe on a close schedule to coordinate with the arrival of ocean vessels at Mobile.

We employ approximately 3,000 people, and our export business has contributed substantially to the health of our company and the employment of our people. In fact, the Warrior-Tombigbee Waterway and the Port of Mobile are important to the economic health of our entire community. In addition to our pipe we find large volumes of iron and steel, ore and coal moving in water commerce.

If this waterway is allowed to deteriorate, it will have an adverse effect on our business, our employment and the general welfare of our entire area.

Finally, may I urge that the Subcommittee give careful consideration to the testimony to be given by Mr. Offa S. Nichols, Jr., President of the Warrior-Tombigbee Development Association. He also speaks for me in this most important matter.

STATEMENT OF CARL A. TORBERT, JR., PRESIDENT, RADCLIFF MATERIALS, INC., MOBILE, ALA.

The Warrior-Tombigbee Waterway along with the other waterways of the State of Alabama are invaluable links to a successful Port of Mobile and the economic growth in South Alabama. Offa S. Nichols, Jr., President of the Warrior-Tombigbee Development Association, will present testimony stressing the need for maintaining and enhancing the efficiency and reliability of the Warrior-Tombigbee System as well as the importance of low-cost, energy efficient water transportation to local, national and international trade. We fully support and endorse his testimony.

Radcliff Materials, Inc. is one of the leading producers of construction raw materials and aggregates on the Gulf Coast. We rely extensively on the waterways of Alabama, Florida, Louisiana, Mississippi and Texas for production and delivery of our products. In 1983 we transported via Alabama waterways in excess of one million tons of sand and gravel. We also transported 1,500,000 tons of limestone as well as significant quantities of other products. Our projections for 1984 are:

Sand and Gravel	1,300,000 tons
Limestone	2,000,000 tons
Other	750,000 tons

Radcliff Materials, Inc. operates a fleet of 26 boats, 105 barges and 9 dredges. We maintain a large terminal and handling facility on

McDuffie Island in Mobile, Alabama in addition to numerous support facilities throughout South Alabama and the Gulf Coast.

The maintenance of authorized project dimensions is essential for the efficient, orderly production and delivery of materials throughout the waterway system. In order to provide this capability, it is imperative that the Army Corps of Engineers be provided with the appropriations necessary to continue the maintenance and development of the Warrior-Tombigbee Waterway System as requested in the fiscal year 1985 budget. It is also requested that additional funds be provided to insure that the Corps has the capability and flexibility necessary to maximize the utilization of the Waterway System and Mobile Harbor. Additionally, the provision for planning funds to replace the outmoded Oliver Lock should not be overlooked.

We sincerely appreciate the Committee's faith in the future of the great waterway systems of the State of Alabama and welcome its continued support of these vital projects.

STATEMENT OF J. C. LAW, HUNT OIL CO., TUSCALOOSA, ALA.

As a concerned user of the Warrior-Tombigbee Waterway, I would like to state my reasons for supporting this waterway.

Hunt Oil Company is a refinery that produces such products as all grades of gasoline, several types of asphalts, fuel oils and coke. We receive approximately 21,000 tons of crude oil per month and approximately 20,000 of vacuum bottoms by barge. We, in turn, barge out approximately 20,000 tons of cracker feed a month. The above tonnage represents millions of dollars in revenue. Our dock facilities, which were first built in 1946, are located on the Black Warrior River, near the Oliver Lock and Dam. We have an expansion in the scope for the Hunt Oil Company, thus producing more products that will need to be barged out or more barged in.

One crucial reason for us needing the waterway is that we make a product called "cracker feed" named so because it is used in catalytic crackers. The only way we have of delivering this product is by the waterways. Fortunately, the refineries that we ship to are all over the intercoastal waterway.

We also receive crude oil from international freighters; first offloaded in Mobile into storage tanks, and then barged to our refinery.

Let me also state that with us having so much barge traffic, it is very important that monies are needed for dredging operations to continue so we can maintain proper draft limits for traffic to move in an economical manner.

So you can gather how important our waterways are, due to lower costs and energy efficiency, in the operation of our refinery. We express deep concern over any delay or non-approval of these much needed funds. I am

STATEMENT OF C. T. ESTOCK, CHICAGO BRIDGE & IRON CO.

Please accept this letter as a statement of general support for the testimony to be given by Mr. O. S. Nichols, Jr., President of the Warrior-Tombigbee Development Association.

For many years, our company has encouraged efforts to improve the Warrior-Tombigbee Waterways because of the resulting lower freight rates for our products and efficiency in energy consumption. In late 1974, we opened a multimillion-dollar fabricating facility on the Warrior River in Cordova, Alabama. There we can fabricate and load onto barges extremely large and heavy steel vessels for use in such industries as nuclear, petroleum, chemical processing, pulp and paper, and water and waste treatment. The market decline in the nuclear and oil refining industries compelled us to close the plant for several years. We are now operating it on a limited basis and hope that, as the economy improves, we will be using it more in the future.

While we support the Corps of Engineers' budget request, it does not appear to be adequate. When you remove the $3.5 million allocated for a channel rehabilitation program, it leaves only $9.4 million for regular operations and maintenance items. I understand this is approximately $3 million below the normal experience. Also, we feel that the budget should contain funds to permit continuing the Oliver Lock replacement planning.

We solicit your support for the continued effort to improve the efficiency and reliability of the Warrior-Tombigbee Waterways.

STATEMENT OF R. W. RAYBUCK, GENERAL MANAGER, UNITED STATES STEEL CORP.

I would like to take this opportunity to express support for the testimony to be presented to your committee by Mr. Offa S. Nichols, Jr., President of the Warrior Tombigbee Development Association. United States Steel Corporation in Alabama relies very heavily upon the Warrior Tombigbee River System to provide economic means of transportation for our raw materials and products. We feel that it is essential the Warrior Tombigbee System be maintained and operated in a manner to promote the continuing growth of this area.

Our Corporation's decision to invest heavily in this geographic area was prompted in part by the fact that we have access to a system for water transportation. These investments having contributed significantly to what would otherwise have been a high unemployment area.

Current plans by United States Steel Corporation call for heavy use of the Warrior Tombigbee System. Our current forecast is as follows:

	NET TONS/YEAR			
YEAR	ORE	COAL	FINISHED PRODUCTS AND SCRAP	TOTAL
1984	1,000,000	960,000	140,000	2,100,000
1985	3,000,000	1,200,000	267,000	4,467,000
1986	3,000,000	1,200,000	318,000	4,518,000
1987	3,000,000	1,200,000	329,000	4,529,000
1988	3,000,000	1,200,000	340,000	4,540,000

We hope that you will provide the necessary support for maintenance and continuing development of this vital river system.

STATEMENT OF GEORGE S. SHIRLEY, PRESIDENT AND CHIEF EXECUTIVE OFFICER, FIRST NATIONAL BANK OF TUSKALOOSA, ALA.

I am writing to request that your Committee give full support to the Warrior-Tombigbee Waterway project and to the continued development of the Port of Mobile. Since Tuscaloosa is located on the banks of the Black Warrior River, I am keenly aware of the importance of this waterway to the economic development of our area. We recognize that the Warrior-Tombigbee Waterway plays an important role in the shipment of petroleum, coal, iron ore and farm products from this area and serves a large part of the State of Alabama. Proper funding for this project is vital to its future development.

We here in Tuscaloosa are vitally interested in the replacement of the 47-year-old Oliver Lock and Dam which is the only remaining deterrent to more efficient and economical waterway shipment. I would hope that your Committee would give its full support to the U. S. Corps of Engineers' Operations and Maintenance Budget and that you will make funds available for the continuation of the preliminary design and planning for Oliver Lock and Dam's replacement.

Your support of the Warrior-Tombigbee Waterway project and the replacement of the Oliver Lock and Dam is vital to the future economic growth of Tuscaloosa and surrounding areas.

STATEMENT OF ALAN R. BARTON, MISSISSIPPI POWER CO.

Colonel Offa S. Nichols, Jr., President of the Warrior-Tombigbee Development Association, is appearing before your Subcommittee in support of the Waterway and the Corps of Engineers' budget request relating to the project. As President of Mississippi Power Company, a user of the Waterway, I am writing in support of Colonel Nichols' testimony. I am also requesting consideration be given to maintaining the current funding level for operation and maintenance and to additional funding for continued planning and engineering support, channel improvement work, and for preparation for the replacement of Oliver Lock.

The cost of fuel is the single largest operating expense Mississippi Power Company faces. Coal mined in the region served by the Warrior-Tombigbee Waterway provides us with a reliable, competitive source of fuel.
Any deterioration of the reliability of shipping along the Waterway would force the Comany to higher cost suppliers. The Warrior-Tombigbee Waterway has played an important role since 1976 in the delivery of coal to MPC's facilities. In 1983, approximately twenty percent, or 540,000 tons, of our coal purchases were shipped over this Waterway. We expect the quantity of fuel shipped over this waterway to continue to increase.

Mississippi Power Company operates in southeast Mississippi and provides electric service to over 160,000 customers. Our customers include several military installations, federal government agencies, and prime defense contractors.

Any deterioration in the ability to ship over this waterway, or an increase in our costs due to increased delays, would not only adversely affect all of these customers, including the federal installations, but would also impede future economic development in southeast Mississippi.

Your favorable consideration of the testimony on behalf of the Warrior-Tombigbee Development Association will be greatly appreciated.

STATEMENT OF W. J. HEARIN, PUBLISHER, MOBILE (ALA.) PRESS REGISTER

This letter is written as a demonstration of my support of the improved efficiency of the Warrior-Tombigbee Waterway and as a statement of my conviction that its importance to this area cannot be overstated.

Although I will not be able to appear in person before the Appropriations Committee on April 2, 1984, Mr. Offa S. Nichols, Jr., President of the Warrior-Tombigbee Development Association, will appear before your Committee and will present to you the consensus of the ever-widening Warrior-Tombigbee support group.

I want to go on record as having been a proponent of the Warrior-Tombigbee project for many years and as continuing to be convinced of its importance to the Port of Mobile and to the State of Alabama as a whole. I heartily concur with Mr. Nichols' presentation to you both as to support of the Warrior-Tombigbee and to the need of an increase in the Corps of Engineers' budget request, for reasons Mr. Nichols will make abundantly clear.

Your consideration of this letter is greatly appreciated.

STATEMENT OF SHELDON L. MORGAN, SENIOR VICE PRESIDENT, MERCHANTS NATIONAL BANK, MOBILE, ALA.

Over the past several years, the Alabama State Docks has invested over $250 million in expanding and modernizing its facilities at the Port of Mobile. This port is a major factor in the economy of Alabama and is predominant in the economy of Mobile. Consequently, we are interested in those factors impacting this economy and, certainly, the Warrior-Tombigbee Waterway is vital in this role. It serves the manufacturing and mining region and all the agricultural areas and industrial production facilities in western Alabama. These interests have, during the same period, invested over $1 billion in waterway-related facilities. The waterway has fulfilled this role and served as a stimulant for one hundred years, having been periodically improved until today it is a modern system with one major exception, the Oliver Lock and Dam, which needs replacing.

This waterway is currently handling most of the coal moving out of Mobile for export. Many basic materials move on this system and it is important that funds for an adequate Operations & Maintenance program be appropriated for the BWT as well as the Corps' requested O&M funds for the Mobile Harbor.

The Corps of Engineers report on the replacement of Oliver Lock has now been approved by the Board of Engineers for Rivers and Harbors. To continue the planning for this replacement, we request some amount for this program. It is vital that this continuing process not be interrupted.

The monies we are requesting are a valid investment by the Federal Government, which will continue to be matched many times over by local investment.

STATEMENT OF JOHN C. HOPE III, EXECUTIVE VICE PRESIDENT, FIRST NATIONAL BANK, MOBILE, ALA.

The First National Bank of Mobile is committed to the Port of Mobile and the Warrior-Tombigbee Waterway. We feel that the continued development of this Waterway will provide much needed stimulus for continued growth in Alabama, and the Port of Mobile.

The direct employment in Mobile, because of our Port, is some 4,500 jobs. Of that the Warrior-Tombigbee Waterway contributes directly to some 1,600 jobs of that total because of the commerce that travels it through the Port of Mobile annually. We feel we must continue to work together to improve the efficiency and reliability of this Waterway because of costs, energy efficiency, trade and current/future employment opportunities for the citizens of Alabama.

First National Bank supports the Warrior-Tombigbee Development Association and their efforts to improve and continue to develop this Waterway. We, therefore, urge this Subcommittee to approve the Corps of Engineers' request for funds for this project, and that additional funds be made available for refinement of the studies, continued planning and engineering.

STATEMENT OF HUGH H. KNOX, SUPERVISOR/MARINE OPERATIONS, INTERNATIONAL PAPER CO.

International Paper Company, as a longtime user of the Warrior-Tombigbee Waterway and a member of the Warrior-Tombigbee Development Association, is vitally concerned and interested in the continued maintenance and improvement of subject waterway.

In the late 1920's, International Paper Company located one of its largest primary mills in the Mobile area influenced to a great degree on an abundant timber supply, accessible by water, and the port of Mobile for outbound finished products. We currently are operating a fleet of two 1600 H.P. towboats and a fleet of forty-three deck and hopper barges on this waterway. Our company has announced this year a modernization program at our Mobile mill at a cost in excess of $300,000,000 justified in part on the potential for moving significant tonnage increases of fiber from the hardwood forests up this waterway.

We are deeply concerned that the Corps' O&M budget request for FY85 is inadequate as a significant portion of the requested funds are earmarked for channel rehabilitation leaving a balance of some 3.5 million below our normal experience.

Our company wholeheartedly recommends to you and the members of the Subcommittee on Appropriations for Energy and Water Development the testimony presented to you through the representatives of the Warrior-Tombigbee Development Association.

STATEMENT OF JOHN M. HARBERT III, BIRMINGHAM, ALA.

The Warrior-Tombigbee Waterway is an important link necessary for trans-shipment of coal, iron ore, and farm products through the state of Alabama to the Port of Mobile for export, ultimately enhancing the U.S. balance of payments position. From my perspective in the construction business for more than 35 years, I see this waterway as vital to the continued well being of thousands of people who derive their income because of its presence.

I strongly support the Warrior-Tombigbee project as it directly contributes to our industrial growth in providing an economical and available transportation method for industry and is conducive to further economic development.

While I support the Corps of Engineers' request for funding, it appears to be inadequate to both provide needed channel improvements and, at the same time, necessary operations and maintenance. Improved efficiency and reliability of the system is imperative for building confidence in the waterway. Added money is also needed to permit continued site investigation and preliminary design for replacement of the 47-year old, out-moded Oliver Lock.

.In essence, I support the testimony to be given by the President of the Warrior-Tombigbee Development Association and hope that the importance of his comments will be well taken by the Appropriations Committee.

STATEMENT OF DON L. HARRELL, JR., MANAGER, SALES ADMINISTRATION, VULCAN MATERIALS CO., BIRMINGHAM, ALA.

We strongly support the testimony of the Warrior-Tombigbee Development Association. We are part of the collective effort to improve the efficiency and reliability of the Warrior-Tombigbee Waterway and the Port of Mobile. In the future, we plan to use the Waterway to ship crushed stone to the Gulf Coast to be used by the construction industry in concrete, asphalt and road bases. The crushed stone will replace the rapidly depleting gravel, clam and reef shells with a superior construction material. The upgrading of the Waterway will not only benefit an area that has been extremely hard hit by the depressed economy, but will better utilize the lower costs, energy efficient barge transportation.

We support the Corps' budget request for Operations and Maintenance for the Warrior-Tombigbee and Mobile Harbor, but we feel that additional funds should be made available to insure both an adequate O & M Program as well as a channel rehabilitation program. Funds should also be made available to continue the orderly and efficient preparation for the replacement of the Oliver Lock which will be an investment in the future of our nation, region as well as Alabama.

STATEMENT OF DOUGLAS J. MCCOLL, PRESIDENT, MOBILE BAR PILOTS ASSOCIATION

The Mobile Bar Pilots Association is in support of all efforts being exerted to the completion of the Warrior-Tombigbee Connection to the great mid-continent river system project by the U. S. Corps of Engineers.

The Warrior-Tombigbee Waterway will, without a doubt, be a great asset to the Port of Mobile and the rivers it connects with, by allowing industry to establish operations along the river system which allows for both export and import of commodities through the great Port of Mobile, Alabama.

As a member of this group of ship pilots, I can actually forsee the sea-borne commerce of this port. The port now handles a good amount of container cargo as well as break bulk and bulk, both liquid-crude oil and refined product and dry bulk.

From time to time during my pilotage duties aboard vessels while transiting Mobile Ship Channel, I have been asked about a completion date of this waterway system. These ship masters seem to think it will be a great asset to the shippers and a shot in the arm to the trade in which seagoing vessels are used.

I would like to express our appreciation to you as Chariman of the Subcommittee on Appropriations for Energy and Water Development and urge you and your committee members to support the completion of this very important project.

OHIO WATER RESOURCE PROJECTS

STATEMENT OF HON. JOHN GLENN, U.S. SENATOR FROM OHIO

Senator MATTINGLY. The next will be Mr. William Napier, assistant director of the Ohio Department of Natural Resources who will be supported by Senator Glenn.

Senator GLENN. Thank you, Mr. Chairman, I would like to introduce the people from Ohio who are here today. As you indicated, William Napier, who is assistant director of natural resources; Mr. Robert Lucas, one of his staff members; our speaker of the Ohio House, Speaker Pro Tem Barney Quilter is with us; Representative Fred Deering; Representative Ross Boggs, and Mr. Robert Anderson of the Water Management Association of Ohio. They will be giving testimony, Mr. Chairman, on several different projects involving Ohio. They are of great importance to the economic health of our State.

Modernizing Gallipolis is an important step in rebuilding America's waterway infrastructure and, indeed, affects several States. The new lock and dam has been held up for some time. The existing structure is a real bottleneck on the upper Ohio River and, at one time, was written up as the biggest bottleneck in the whole Mississippi watershed. I don't know if it still rates this title, but I know it is enough of an example that Congressional Quarterly, last July, wrote it up talking about a barge wreck that happened there because of inadequate facilities. This one incident caused the loss of hundreds of thousands or even millions of dollars. So you can see that this project is very important to us.

Another project of importance is the Geneva-on-the-Lake small boat project. This is one, I think, that is particularly good because it is a 50–50 split on the cost between the State and the Federal Government, for a project that isn't particularly expensive. You will be receiving testimony from Representative Boggs on that.

Maumee Bay State Park, which is adjacent to Toledo, is similar with the State picking up one-third of the cost. I have been out on some of those dikes myself. At the moment, I think we are asking for $300,000 for design work. The total project cost will be $10.3 million. In addition, the State plans to commit $36 million to expand all the facilities of the park. But the area is endangered by beach erosion on the western end of Lake Erie.

So these are all programs that we think are very much worthwhile. I am glad to be here today and honored to be able to present these fine Ohio representatives here to you and commend their testimony to you, some of which I have already read and think it is right on target.

With that, I appreciate your forebearance here in letting me introduce our people from Ohio.

Senator MATTINGLY. Thank you very much, Senator Glenn.

Mr. Napier and associates, if you brought the right stuff——

Senator GLENN. Now we will see if the committee has the right stuff.

MAUMEE STATE PARK, OHIO

STATEMENT OF WILLIAM NAPIER, ASSISTANT DIRECTOR, OHIO DEPARTMENT OF NATURAL RESOURCES

Mr. NAPIER. Thank you, Senator Mattingly. We very much appreciate the opportunity to appear before the committee today and state our case for the projects.

We are planning a very extensive park development, Maumee State Park, near to Toledo. We are asking the Ohio General Assembly to fund the development of a golf course at the State park there. It is one we will be very proud of.

We need, however, to come to grips with shore erosion along Lake Erie. In that regard, as you are aware, the Corps has established a category of funding under gereral investigation for projects which are likely to be constructed but have yet to receive the formal congressional authorization. The categories referred to is continued planning and engineering and we would like to think this is an outstanding project for receiving funds under this category. We are asking for the consideration of $300,000 in fiscal year 1985—it is not in the budget at the present time—that would enable the Corps to prepare the general design memorandum and advance the project to the point where preparation of plans and specifications would be all that remains to be done prior to the construction phase.

GENEVA-ON-THE-LAKE, OHIO

The other project that Senator Glenn mentioned that is very important to us is the harbor at Geneva-on-the-Lake. It is a project that is again cost sharing one that we in the State of Ohio and the Corps of Engineers, that there is no funding included in the 1985 budget that will allow for construction to begin. We would like to ask today for consideration for the sum of $1 million to be added to the fiscal year 1985 budget for the Geneva-on-the-Lake Harbor project. It is anticipated——

Senator MATTINGLY. How much was that?

Mr. NAPIER. $1 million.

Senator MATTINGLY. I thought you said $100 million. You almost got my attention.

Mr. NAPIER. It is anticipated if we can get the million dollars added to the budget, it would allow the Corps of Engineers to proceed with the plans and specifications and initiate construction of this badly needed project in 1985. I would like to ask, Senator Mattingly, if I could ask our Speaker Pro Tem Barney Quilter and other members of the Ohio General Assembly if they would like to speak briefly.

Senator MATTINGLY. Please do.

STATEMENT OF BARNEY QUILTER, SPEAKER PRO TEM, OHIO HOUSE OF REPRESENTATIVES

Mr. QUILTER. Thank you. I know how long afternoons are and, therefore, I have no prepared statement. I will be very brief.

Senator, some things that are in here are very important to me and important to Representative Deering and Mr. Boggs also. Immediately important to me is the redevelopment of the downtown Toledo area. Senator, we have had private citizens invest millions of dollars in this particular project. Just last week, Governor Celeste came in with a $10 million grant in order to help us to build a convention center in the downtown area. What is important is the fact that the Maumee State Park that was referred to today is just a 15-minute drive from the downtown area, so it all intertwines with what happens downtown. That is a 30-minute ride from Monroe, Mich.

Senator, I am proud of my city and proud of what we are attempting to do. I might add, too, this particular project—there is an estimated 14 million people who live within a 2-hour drive of this proposed State park and five congressional districts will be directly served by the Maumee State Park. It is located on beautiful Lake Erie over which you people here have the jurisdiciton. That is the reason we are here because we have no jurisdiction, and we need help from you.

Senator, I have been working on this particular project for 16 long years. I have been through four administrations in my State and, very frankly, I don't know how much longer I can hold out. This is why I am here today and I would appreciate consideration by the committee. We certainly thank you.

Senator MATTINGLY. You have great staying power.

STATEMENT OF HON. FRED DEERING, MEMBER, OHIO HOUSE OF REPRESENTATIVES

Mr. DEERING. I represent the shores of Lake Erie also and am also a member of the finance committee. I will say the State does have the funds to carry out its portion of building of the parks as well as a proportionate share of the matching funds that will be necessary for this great facility—we require to stop the erosion on Lake Erie. I say this is in the western basin of Lake Erie. As you know, a few years ago, it was considered a dead lake. We have taken responsibility along with the Federal funding, with the sewage problems; we cleaned that lake up and we made it the outstanding fresh water fishing area in the world.

Of course, we call it the walleye capital of the world. Of course, as Mr. Quilter indicated, we are in the area of 14 million people. They come there and use it as an area for recreation. We want to proceed with this project so that many people can share in the natural areas of the great Lake Erie and, of course, will help the economic development of our particular area.

We really appreciate your serious consideration.

STATEMENT OF HON. ROSS BOGGS, MEMBER, OHIO HOUSE OF REPRESENTATIVES

Mr. BOGGS. I, too, Senators, would like to thank you for the opportunity to speak before you.

If you can visualize Cleveland, Ohio, and then look east, there is no major boat harbor between Cleveland and Erie, Pa. If you can visualize halfway between that, that is where the Geneva State Park marina is to be built. And you go from Cleveland to Akron, to Youngstown to Pittsburgh, to Warren, Erie, Pa.; we will have a great draw of people who are willing to come to Lake Erie and to fish. The Great Lake has returned; walleye have returned, and there are needs of a good small boat harbor.

Again, on behalf of my brother Senator Boggs who is sick today and could not make it, we thank you for the opportunity to meet with you.

Mr. NAPIER. Also with us is Bob Anderson with the Water Management of Ohio appearing in support of our statement.

STATEMENT OF ROBERT ANDERSON, WATER MANAGEMENT ASSOCIATION OF OHIO

Mr. ANDERSON. Mr. Chairman, Senator Stennis, I am one of the founding members of Maumee Association of Ohio, an organization representing all water interests of the State of Ohio. I am here speaking for the board of directors to encourage this committee to provide the funds requested in the testimony of Assistant Director Napier and including the extra million dollars to get the program moving. I would like to note one of the four purposes of our organization and it says, "To encourage and always possible needed legislation both State and National to carry out the association objectives."

I thank you for the opportunity to speak for all the people in the State of Ohio through the Water Management Association of Ohio.

Thank you.

Mr. NAPIER. Senator, we also have with us a statement by an organization called Dynamo-O VIA which is supportive of our position. We also would like if you would have that inserted in the hearing record.

Senator MATTINGLY. Without objection.

We thank you very much and you all speak very well of the project and this committee will certainly take it into consideration. I can assure you of that.

Senator STENNIS. I have nothing further. I am impressed with these gentlemen, thinking about their backgrounds and being willing to give time, attention, travel like this. This is Amerca at its best.

Senator MATTINGLY. It certainly is.

I forget what your name was. You said you served under four different administrations trying to get this done.

[The statement follows:]

STATEMENT OF DR. WILLIAM J. NAPIER, ASSISTANT DIRECTOR, OHIO DEPARTMENT OF NATURAL RESOURCES

Mr. Chairman and members of the subcommittee, I am William Napier, Assistant Director of the Ohio Department of Natural Resources, and I am here representing the Honorable Myrl H. Shoemaker, Lt. Governor of the State of Ohio and Director of the Ohio Department of Natural Resources. I am accompanied today by four outstanding members of the Ohio General Assembly, Senator Robert J. Boggs, Representative Barney Quilter, Speaker Pro Tem of the Ohio House of Representatives, Representative Fred Deering and Representative Ross Boggs. All are strong advocates of the projects to which I will be referring.

As you may be aware, Ohio has a long history of cooperation with the Army Corps of Engineers in the joint development of our precious water resources. From the early days of the Muskingum River Basin development to the more recent improvements on the Scioto and Little Miami Rivers and the shoreline of Lake Erie, we believe the state, as well as its political subdivisions, has more than adequately fulfilled its role as "non-federal" sponsor. We have in the past, and will continue in the future, to do our part towards promoting a true partnership with the federal government in joint development and management of our water resources. However, it is becoming more difficult for us to meet our objectives and ultimately achieve our goals with the continued decline in civil works dollars being appropriated for our state for vitally important water resources projects.

The FY '85 proposed budget for Ohio is $30.6 million. Last year it was $44 million, the year before that $54 million, and the year before that, FY '82, $70 million. The amount included in the President's FY '85 Budget proposal represents the least amount of federal dollars committed to the Corps' civil works program in Ohio in almost 25 years. In 1962, slightly under $30 million was appropriated for the State of Ohio. If we were to compare how much water resources development we will be able to buy with $30 million in FY '85 to how much water resources development was bought in 1962 with the "same" amount of money, you would see clearly the impact of more than 20 years of inflation.

There are undoubtedly several reasons to explain the reduction in federal dollars. One good one is the fact that no water development authorization legislation has been enacted since 1976. Many sound water projects are included in Congressman Roe's H.R. 3678, including the long-awaited Gallipolis Locks and Dam renovation, an important project to our state. In terms of authorization funding, Congressman Roe's measure includes projects totaling over $142 million for Ohio alone, excluding the Gallipolis project.

While lack of authorization is significant, we have several projects and surveys in Ohio which are authorized, but which are not included for funding in President Reagan's budget. Of those included in the budget, many are not funded at a level that even approaches the Corps' full capability for FY '85.

MAUMEE BAY STATE PARK SHORE PROTECTION PROJECT

One project not included in the proposed FY '85 Budget and of vital importance to Ohio is the proposed shore erosion protection project along Lake Erie at Maumee Bay State Park. This $11.8 million proposal to be cost shared with the Corps of Engineers on a 70% federal to 30% non-federal basis is intended to protect a multimillion dollar recreational complex planned for Maumee Bay State Park. Construction of a lodge, cabins, golf course and other support facilities, all await the Corps' erosion protection project. These improvements must necessarily be delayed because of the rapid shoreline recession rate experienced at this location along the Lake Erie shore.

On December 5, 1983, the Corps' Board of Engineers for Rivers and Harbors recommended favorable action on the report of the Buffalo District Engineer for a shore protection project at Maumee Bay State Park.

Recognizing the importance of the erosion protection project to the planned development at the Park, Congresswoman Marcy Kaptur introduced legislation for authorization during the first session of the 98th Congress. The House Public Works and Transportation Committee along with the Senate Environment and Public Works Committee have both adopted Congresswoman Kaptur's bill as part of their respective proposals for omnibus water resources legislation. However, while awaiting congressional action of this proposed legislation, valuable time is being lost that could be spent in performing advanced engineering and design on the proposed erosion protection project.

As you are aware, the Corps has established a category of funding under General Investigation for projects which are likely to be constructed, but have as yet to receive formal congressional authorization. The category is referred to as Continued Planning and Engineering. The Maumee Bay State Park Shore Protection project is an outstanding candidate for receipt of funds under the "CP&E" category.

An appropriation of $300,000 ± in FY '85 would enable the Corps to prepare the general design memorandum and advance the project to the point where preparation of plans and specifications would be all that remains to be done prior to construction.

In view of the overwhelming support for this project, its obvious need, and the commitment of the State of Ohio to share in the project cost, plus Ohio's planned development of a $25 million recreational complex at the Park, we request that $300,000 be added to the FY '85 Budget for continued planning and engineering on the Maumee Bay State Park Shore Protection project.

As soon as the engineering and design work are completed, we will be looking for a construction start. Based on current estimates, it is anticipated that $7.6 million will be required for the federal portion of the actual construction costs. We anticipate that the State of Ohio will be prepared to contribute its share at the time of construction, but we need to be assured that the federal share will be available. In addition, as I mentioned earlier, the erosion control project will protect a recreational complex currently valued at over $6 million, with further planned improvements estimated at $25 million. Therefore, what we are looking at is a federal investment of $8.1 million, including the planning and engineering work, compared to an eventual state investment of almost $35 million, counting the state's share of the erosion protection project. The end result would be an outstanding public recreational facility for the people of Ohio, Indiana, Michigan and, I am sure, several other states as well.

Another project, also not included in the FY '85 Budget proposal, is the Geneva-on-the-Lake navigation improvements.

GENEVA-ON-THE-LAKE HARBOR

Since 1977, the Congress has annually provided funding to the Corps of Engineers' budgets to perform the advanced engineering and design work on the Geneva-on-the-Lake navigation improvement project. At the conclusion of the current fiscal year on September 30th, the Corps will have expended almost $1 million on post authorization planning. With the exception of plans and specifications, the project will be ready for construction. However, there is no funding included in President Reagan's FY '85 Budget to allow for construction to begin.

The State of Ohio, Department of Natural Resources, has expressed its intent on several occasions throughout the advanced engineering and design work to serve as the non-federal sponsor and furnished all of the required non-federal assurances. These will include, but are not limited to, all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project; suitable areas for initial and subsequent disposal of spoil; all necessary retaining dikes, bulkheads and embankments or the cost of such retaining works; the provision of access roads, mooring facilities, and parking and service areas, including a launching ramp; all essential sanitary facilities, and an adequate public landing or wharf, with provision for the sale of motor fuel and lubricants and provision of potable water. We, as the non-federal sponsor, must also provide all docks and berthing areas and maintain adequate depths to these facilities. All of these items must be provided by the non-federal interest in addition to 50% of the cost of the actual project which is to be built by the Corps of Engineers.

At 1983 price levels, the federal share of the improvements is estimated to be $4.4 million. The non-federal "contribution" is almost $10 million. I think you might agree, this kind of cost sharing arrangement might even satisfy the new "cost shifting" initiatives of the current administration.

However, I am here today to pledge the good faith and support of the Ohio Department of Natural Resources behind the project proposed by the Corps of Engineers. I am also here to ask your support by adding $1 million to the FY '85 Budget for the Geneva-on-the-Lake Harbor project. It is anticipated that $1 million would enable the Corps to prepare the plans and specifications and initiate construction of the project in 1985.

The community of Geneva-on-the-Lake and several surrounding communities have expressed their support for this project. It is important to them from an economic standpoint and from the standpoint of boating safety. I hope we can count on your support as well.

Rather than list each excluded project or survey individually, I would just mention a few others which are deserving of your attention. Among the surveys are: Western Shore of Lake Erie, Lake Erie Coast, Muskingum River Basin, Central Ohio Survey and the Miami River Survey.

Some important projects include: Gallipolis Locks and Dam renovation, North Chillicothe Flood Control, Big Creek Flood Control project at Cleveland, Mansfield Flood Control, West Carrollton Flood Control, Conneaut Harbor navigation improvements for small craft, and several projects not considered under line item, but included under the Corps' small projects program.

I very much appreciate the opportunity to appear before your subcommittee and present this testimony. I would be happy to respond to any questions you might have.

STATEMENT OF R. BARRY PALMER, EXECUTIVE DIRECTOR, DINAMO/OVIA

Mr. Chairman and Members of the Subcommittee.

My name is Barry Palmer. I am Executive Director of DINAMO/OVIA -- the Association for the Development of Interstate Navigability in America's Ohio Valley. We are a broad coalition of business, labor and state governments from throughout the Ohio Valley working toward modernization of our region's lock and dam facilities. These projects are crucial to sustaining economic viability in a region of our nation that has yet to fully recovery from the ravaging effects of the recent recession. I appear on behalf of DINAMO/OVIA's Executive Committee and Board of Directors to present our organization's recommendations for Fiscal Year 1985 appropriations for inland navigation projects and studies in the Ohio River Basin.

In presenting our views, please understand that DINAMO/OVIA is keenly aware of the urgent problem our nation faces regarding ever-increasing budget deficits. We realize that increasing government borrowing from the credit markets will have a growing adverse effect on America's economy and solutions must be found soon. Both Houses of Congress are to be commended for their efforts toward finding such a solution.

It is the Congress's responsibility, then, to see that all available funds be utilized in the most appropriate and cost-effective manner. All appropriations for the coming Fiscal Year and all fiscal years after that should be measured on, among other criteria, their impacts on economic development, cost-effectiveness, and the ability to maintain current jobs and produce new ones.

Therefore, it is the position of DINAMO/OVIA that key lock and dam projects vital to the Ohio River Basin economy require additional funds than those budgeted by the Administration for 1985.

Our first and most pressing concern is the Gallipolis Lock and Dam on the Ohio River. Replacement of the Gallipolis Locks and rehabilitation of the Dam is not only DINAMO/OVIA's first priority, it is of critical importance to our region, and our nation. Located on the Ohio-West Virginia border, 280 miles downstream of Pittsburgh, the Gallipolis Locks are severely undersized and are so situated on a bend in the Ohio as to create a treacherous navigation hazard for shippers. Severe congestion is commonplace at Gallipolis. The result is higher barge transportation costs.

Gallipolis is considered one of the worst inland navigation facilities in the country. Yet the U.S. Army Corps of Engineers is required to halt all further work on replacing Gallipolis because funding for continued planning and engineering have been exhausted, effective April 1, 1984; and lacking the necessary Congressional authorization to begin construction on the replacement for Gallipolis, the Corps cannot proceed with the necessary final design and real estate acquisitions. The Corps estimates that, even with a Congressional authorization to replace Gallipolis, such as that in HR3678, Congressman Robert Roe's omnibus water resources bill, this summer, construction at Gallipolis would not begin in earnest for at least three years.

In 1980, the commerce of 20 states passed through Gallipolis. Nearly 40 million tons of bulk commodities pass through Gallipolis each year, with an estimated value of $4.5 billion, according to a study DINAMO/OVIA has just completed. While it is nearly impossible to determine the number of jobs directly and indirectly dependent on the Gallipolis Lock, we do know that these states send or receive traffic through Gallipolis: Alabama, Arkansas, Florida, Iowa, Illinois, Indiana, Kentucky, Louisiana, Minnesota, Missouri, Mississippi, Nebraska, New Jersey, Ohio, Oklahoma, Pennsylvania, Tennessee, Texas, Wisconsin and West Virginia. Thousands of jobs would be created and be maintained from reconstruction of the Gallipolis Locks. We urge the Subcommittee to include in its recommendation new start monies for Gallipolis based upon its advanced stage in the planning and engineering process and the need to proceed with construction soon. This important project cannot afford to be delayed. The Senate Environment and Public Works Committee estimates that Gallipolis can be rebuilt at a total Federal cost of $313 million. The return on this investment would be $12.20 for every dollar.

The monies allocated for the major rehabilitation of three other DINAMO/OVIA priority projects -- $985,000 for Emsworth Locks and Dam, $1,240,000 for Locks and Dam #53, and $7,100,000 for Montgomery Island Locks and Dam -- are, in our judgement, adequate to meet the Corps' needs to modernize these important facilities.

Monies allocated for studies in the Ohio Valley are adequate with these two major exceptions: First, DINAMO/OVIA urges the Congress to increase appropriations for the Kanawha River Navigation Study from $100,000 to $350,000 to advance the study six months and the Marmet Lock and Dam interim study nine months. Second, we ask for increased appropriations for the Monongahela-Youghiogheny River Basin from $955,000 to $1,255,000 to advance completion of the Lock #2 interim study six months. Both of these requests are in accordance with Corps of Engineers capabilities. These two areas have been severely affected by the recession and revitalization of the inland navigation facilities are a major step toward full recovery there. The DINAMO/OVIA priority projects on the Kanawha are the Winfield Locks, and on the Monongahela are Locks #7 and #8.

The need for expeditious replacement of Monongahela Locks #7 and #8 is undisputed. A political consensus is building throughout our region and our nation that replacement of Locks 7 and 8 be given the highest priority. DINAMO/OVIA is working very closely with the Senators and Congressmen from Pennsylvania and West Virginia to keep these projects uppermost in the legislative agenda.

Bills are pending in both the House and Senate that would authorize lock replacements at #7 and #8: Senate Bill 1739, sponsored by Senator James Abdnor, and House Bill 3678, introduced by Congressman Robert A. Roe both Chairmen of the respective Water Resources subcommittees. We believe these projects have attracted this broad political support during a time of budgetary restraint because of their importance to jobs, industry and the overall economy of southwestern Pennsylvania, northern West Virginia, and the nation.

According to a study commissioned by DINAMO/OVIA, if nothing is done soon to remedy the situation at Locks #7 and #8, 15,200 jobs directly and indirectly dependent upon the Monongahela River could be lost by the year 2000; almost 20,000 by the year 2040. These jobs are in Pennsylvania and West Virginia, two states hardest hit by the harshest recession in recent history.

DINAMO/OVIA is delighted with recent actions taken on these critical projects, which are our organization's second priority. The Pittsburgh District of the Corps has completed its Feasibility Study and has recommended replacement of the existing deteriorating and under-sized locks with new locks measuring 84' x 720', a size that is far more compatible for the shipment of coal and other cargoes on the Monongahela.

Within the last two weeks, the Board of Engineers for Rivers and Harbors has approved this recommendation, and the report will shortly be before the Chief of Engineers for final approval.

But more monies are needed for the continuation of planning and engineering for Locks #7 and #8. The President's budget calls for no funds for this phase of replacement of these projects for Fiscal Year 1985. Failure to appropriate for Construction, Planning and Engineering will lead to further costly delays. We ask the Congress to appropriate monies to match the Corps' capabilities on these projects: $800,000 for Lock #7 (Grays Landing) and $800,000 for Lock #8 (Point Marion) for a total of $1.6 million for 1985.

Such an investment would be an investment in the future of this severely depressed area. In a recent interview with the Pittsburgh Post-Gazette, W. Bruce Thomas, Vice Chairman of the United States Steel Corporation and a DINAMO/OVIA Vice Chairman, cited the need to rebuild neglected water transportation facilities in the Monongahela Valley as one major step toward revitalizing that area. U.S. Steel announced major cutbacks in the Mon Valley. But, said Thomas, "It's still a good place to make some products and take advantage of water transportation."

By appropriating these requested monies, the Congress would be sending a signal to our region and to the nation that Washington has not written off the heavy manufacturing industries and the thousands of related jobs dependent on the Monongahela.

Finally, I would like to take this opportunity to briefly address an issue closely related to water development appropriations. Those of us seeking modernization of our nation's inland navigational infrastructure are frustrated at the lengthy delays in the authorization process. The General Accounting Office recently reported that more than 21 years pass from the time the Corps of Engineers recognizes the need to replace a lock and dam, to the time construction actually begins. This time lag is simply unacceptable if our nation is to continue to depend upon water transportation as a cost-effective means of moving bulk commodities.

The major delay in the 21-year period, according to GAO, is in the Congressional authorization process. In DINAMO/OVIA's view, the primary reason that authorizations are delayed is the lack of an acceptable method of financing lock and dam modernization. Despite what is an apparent need -- rebuilding old, obsolete and deteriorated locks and dams -- these delays in the Congressional process are clearly due to the lack of a comprehensive, long-term, predictable and stable cost recovery system that is fair to all the system's beneficiaries. Without such a mechanism, which is acceptable to both the Federal government and commercial users, needed projects have been and will continue to be held hostage to the user charge issue.

Therefore, this Committee should examine closely the feasibility of appropriating funds to initiate construction at critical projects, such as Gallipolis, Locks #7 and #8 on the Monongahela River, Bonneville Lock and Dam, the Second Lock at #26 on the Mississippi River, and the Oliver Bacon Lock on the Black Warrior River. This type of action by the Senate Appropriations Committee will, we believe, force a resolution of the financing issue for inland navigation infrastructure modernization.

In closing, I would like to reiterate DINAMO/OVIA recommendations for new start monies for the Gallipolis project, increased funding for the Kanawha and Monongahela River Studies, and for continued planning and engineering for Locks and Dams #7 and #8 on the Monongahela River.

All of these projects pass the test of promoting economic development, cost-effectiveness and, above all, the ability to maintain current jobs and create new ones in the Ohio Valley.

Therefore, it is DINAMO/OVIA's sincere hope that this Subcommittee will recommend funds in the amounts requested for these projects and for the continuing studies which we hope will result in early authorization and replacement of other urgently needed navigation improvements in this region.

Thank you.

DELAWARE RIVER NAVIGATION PROJECTS

STATEMENT OF HON. ARLEN SPECTER, U.S. SENATOR FROM PENNSYLVANIA

Senator SPECTER. Good afternoon, Mr. Chairman, Senator Stennis.

I have the high honor this afternoon to present a very distinguished delegation from the Delaware Valley area, which comes to this distinguished subcommittee today with very important testimony indicated not only by the number and prominence, the obvious prominence of this delegation, but also by the substance which they will present here today. These men will be testifying in their capacities as the Joint Executive Committee for the Improvement and Development of the Philadelphia Port Area. I have the pleasure to present to you Capt. Paul Lane Ives, Jr., who is chairman of the Joint Executive Committee for the Improvement and Development of the Philadelphia Port Area; William Harrison, secretary/treasurer of the joint executive committee; Lewis Caccese, who is consultant to the committee; James Kelly, president, Delaware River Port Authority; Capt. Samuel Schellenger, chairman of the Mariners' Advisory Committee; John J. Malone, president of the Philadelphia Port Corp.; Robert L. Pettegrew, executive director of the South Jersey Port Corp.; and Mr. Phillip Chaples, who is director of the Port of Wilmington.

Captain Ives will lead off and they will present, I think, very valuable testimony for the subcommittee relating to channel work of the Corps of Engineers.

It is a pleasure for me to introduce such a large contingency on a very important project for the Delaware Valley area, and we very much appreciate your listening. It is hard to be descending on Washington, DC., on a Monday afternoon. It is a tribute to their industrious and hard work.

Senator MATTINGLY. Thank you very much, Senator Specter. You can put your full statement in for the record, and if you would like, summarize your statement.

Senator SPECTER. If I may, I leave you in excellent hands, many excellent hands. Thank you.

STATEMENT OF CAPT. PAUL LANE IVES, JR., CHAIRMAN, JOINT EXECUTIVE COMMITTEE FOR THE IMPROVEMENT AND DEVELOPMENT OF THE PHILADELPHIA PORT AREA

ACCOMPANIED BY:

LEWIS CACCESE, CONSULTANT, MEMBER, JOINT EXECUTIVE COMMITTEE

WILLIAM A. HARRISON, SECRETARY/TREASURER, MEMBER, JOINT EXECUTIVE COMMITTEE

CAPT. SAMUEL M. SCHELLENGER, CHAIRMAN, MARINERS' ADVISORY COMMITTEE

JAMES R. KELLY, PRESIDENT, DELAWARE RIVER PORT AUTHORITY

JOHN J. MALONE, PRESIDENT, PHILADELPHIA PORT CORP.

JOHN McGARRY, VICE PRESIDENT, PENJERDEL COUNCIL

PHILLIP CHAPLES, DIRECTOR, PORT OF WILMINGTON

ROBERT L. PETTEGREW, EXECUTIVE DIRECTOR, SOUTH JERSEY PORT CORP.

Captain IVES. Thank you, Senator Specter, Mr. Chairman, and Senator Stennis, it is a privilege to be here again. We come down every year, as you may recall, representing the major ports on the Delaware Bay and River which are in three States.

We are in a three-State region, the Delaware Bay and the Delaware River flows through all three States, so we have major ports in the State of Delaware, the State of New Jersey, and the State of Pennsylvania. We are here today to testify on our O&M fiscal year 1985 budget and we are submitting testimony for the record. My comments will be very brief. I would just like to point out that we have several projects in our O&M budget. We have quite a large budget, we have quite a large area and a lot of economic impact in that area. The Chesapeake and Delaware Canal, the Wilmington Harbor, Del., Schuylkill River, which is, I might add, the Port of Wilmington, Del., is the third largest banana port in the United States.

The Schuylkill River, which serves the Philadelphia Navy Base, serves our major grain export base and refineries and the Philadelphia to Trenton project which serves bulk and general cargo terminals, including United States Steel ferrous works and in the Philadelphia to the sea project, which is our 40-foot depth channel, is a key Delaware River anchorage—Marcus Hook.

Dredging is an ongoing process. What we have been trying to do with the Corps over the past years is to dredge ahead somewhat so that we can always be assured of full project depth which is necessary to serve the region.

We have several specific problems I would just like to touch on very briefly here. First of all, in the President's budget for fiscal year 1985 there was no money allocated for the Marcus Hook anchorage which is the only deep anchorage we have on the Delaware River. It is a place to anchor large container ships, bulk carriers in case of fog, or inability to berth.

We also seek additional money to provide the overdredging we need to ensure we have our full project channels at all times.

We have a problem with a new terminal built by the State of New Jersey through the South Jersey Port Corp. The terminal has been completed at considerable expense to the State of New Jersey. However, the Corps of Engineers considers the access channel a very small stretch of the harbor as new work. Actually this was authorized 30 years ago when work was started on it, 30 years ago, the terminal was not finished. It was never completed. The terminal is now finished and is suffering because the larger ships cannot get to that berth.

Camden, N.J., is a depressed area economically and the port offers great hope for jobs and job opportunities.

I would like to conclude my remarks. I wasn't sure whether Senator Specter was going to introduce the rest of my party. We did cover everybody. I am sorry.

I would just like to conclude by saying on the Delaware River, the ports have contributed this year $12 million additional customs receipts bringing our total up to almost $300 million. This money diverts, of course, to the Federal Government, and we think that is a pretty good return on the money the Federal Government invests to keep our channels open so we can get the ships in. I would like to turn the remaining time we have over to Mr. McGarry.

Mr. McGarry. Mr. Chairman, I represent the PENJERDEL Council which is a regional association of commerce, industry, and professions with membership throughout the tri-State Delaware Valley area and sections of Pennsylvania, New Jersey, and Delaware. To conserve your time, I offer for the record full testimony embodied in this statement, which backs up what Captain Ives has already said, and this provides the background information and support to draw conclusions and recommendations. On behalf of the council, we very much appreciate the opportunity to be here today.

Senator Mattingly. Without objection.

[The statement follows:]

STATEMENT OF JOSEPH T. GROSSI, JR., EXECUTIVE SECRETARY, NEW JERSEY DEPARTMENT OF COMMERCE AND ECONOMIC DEVELOPMENT MARITIME ADVISORY COUNCIL

Mr. Chairman and members of the Committee, my name is Joseph T. Grossi, Jr., and I serve as Executive Secretary of the New Jersey Maritime Advisory Council. This Council was established by the New Jersey Department of Commerce and Economic Development within its Office of Business Advocacy at the request of port interests to emphasize New Jersey's position as a Maritime State.

The New Jersey Maritime Advisory Council is pleased to see the many projects that have been included in the President's FY '85 Budget which will benefit New Jersey and its neighboring States. Our natural assets of extensive shoreline and direct access to ocean routes, which enables the waterways contiguous to this State to annually transport 250 million tons of waterborne commerce, must be maintained and expanded to include new projects that will provide the access necessary to service the extensive needs of the Northeast region.

This organization appreciates the opportunity to present our views and recommendations on these matters to the distinguished members of this subcommittee and we know that you will do your best to meet this agenda and best serve the national interest.

Summary of Recommendations

The New Jersey Maritime Advisory Council wishes to recommend an additional appropriation of $18,050,000 in federal funds in Fiscal Year 1985 allocated among seven federal navigation projects. The Federal Budget allotment for these projects is $25,255,000. The following statement shows project recommendations of local interests.

	Funding Recommendation	
Project	Federal Budget	Local Interests
Study Category		
Kill Van Kull & Newark Bay Channels, NY & NJ	None	1,500,000
N.J. Intracoastal Waterway (NJICWW)	None	100,000
N.Y. Harbor and Adjacent Channels, NY & NJ	870,000	2,870,000
Salem River - Salem Port, NJ	None	200,000
Construction Category		
Delaware River at Camden, NJ	None	4,250,000
NY Harbor Collection and Removal of Drift Project, NY & NJ	4,500,000	6,500,000
Maintenance Category		
Delaware River, Philadelphia to the Sea, NJ & PA	19,885,000	27,885,000

The remainder of this statement will elaborate on these listed projects.

Kill Van Kull and Newark Bay Channels, NY & NJ

On July 14, 1972, a critically needed study of a deepening and selective widening of the Kill Van Kull and Newark Bay Channels was authorized by resolution of the House Committee on Public Works. This Federal waterway serves the general cargo-container terminals at Elizabeth and Port Newark on Newark Bay, as well as oil terminals on the Kill Van Kull. The 2,300 acre Port Newark and Elizabeth seaport complex, a $400 million development, has an annual payroll in excess of $100 million.

On December 14, 1981, the Chief of Engineers transmitted the Corps of Engineers Review of Reports (Survey) for recommended improvements to Congress for authorization as a construction project. This Survey Report recommends deepening the existing 35 foot channel to 45 feet below mean low water and for the easing of selected channel bends. The Plan of Improvement has an impressive benefit-cost ratio of 7:1 and is the Corps' National Economic Development (NED) Plan and Least Environmental Damaging (EQ) Plan.

No funds are included in the Federal Budget for this project. Port interests are anxious to avoid further delays in this twelve-year old study. Therefore, we urge that $1,500,000 be provided in Fiscal Year 1985 for continuation of planning and engineering.

The New Jersey Intracoastal Waterway (NJICWW)

This project is a segment of the Inland Waterway between New England and Florida. The NJICWW has only been constructed to a 6 foot depth and is the most restrictive link in the Inland Waterway between New England and Florida. Although this project has been authorized for a 12 foot depth since 1946, it remains unconstructed due to unresolved and difficult wetlands and bridge problems primarily in the Atlantic City and Longport, New Jersey area. Nevertheless, this should not require that the entire length of the NJICWW continue to suffer inadequate dimensions throughout its 100 mile length. The numerous inlets to and from the Atlantic Ocean to the NJICWW suggests that improvements in depth and width on the waterway, in a number of useful segments, appears warranted and should be studied further. Improved channel dimensions would open interior areas to traffic that cannot presently be accommodated. An appropriation in the amount of $100,000 is required to initiate such a study.

New York Harbor and Adjacent Channels, NY & NJ

The New York Harbor and Adjacent Channels study is the result of the Corps of Engineers combining the New York Harbor Claremont Terminal Study, authorized by a House Committee on Public Works resolution adopted July 10, 1968, and the New York Harbor Ambrose Anchorage Channels Study, authorized by a December 5, 1980, resolution of the Senate Committee on Environmental and Public Works. The purpose of this study is to determine the feasibility of modifying, including enlargement and deepening, of the existing 45 foot deep Federal Ambrose and Anchorage Channels, and the privately maintained 24 foot deep Claremont and 35 foot Port Jersey Channels for commercial deep-draft navigation. The Ambrose and Anchorage Channels function as the main access channel to the Port of New York and New Jersey. The study will include consideration of providing 60 feet or more of depth within the Ambrose and Anchorage Channels, and the construction of a 45 foot access channel shoreward to Port Jersey for construction of a Coal terminal.

If this facility were in operation today, it would be one of only two east coast ports to have a channel depth as deep as 45 feet. In comparison, many ports in Europe and in the Pacific Rim have water depths much beyond 45 feet. Some are below 65 feet. Thus, the Port of New York/New Jersey, unlike these other worldwide ports, cannot benefit from the economics of scale which can be obtained through the use of deep-draft vessels. Foreign buyers have repeatedly expressed an interest in deeper channels for the New York/New Jersey Harbor. Therefore, a timely decision is needed on the Corps proposed channel deepening study to provide adequate time for the Port Authority of New York/New Jersey to firm up coal delivery arrangements with these buyers.

The Fiscal Year 1985 Federal Budget allots only $870,000 for the Corps detailed environmental, engineering, and economic studies. To complete these studies in a timely manner, we strongly urge a total of $2,870,000 be provided to assure that the Corps Survey Report and Environmental Impact Statement (EIS) be completed in Fiscal Year 1985.

Salem River - Salem Port, New Jersey

In 1983 the City of Salem Municipal Port Authority was created. The City applied for and received a $1.68 million Federal Urban Renewal Grant which the City matched with sums in the amount of $1.3 million. In addition to this public investment, private dollars were obtained which brought the total funds available to approximately $6 million. The primary objective of this undertaking to establish the Port of Salem is to provide a facility for moving farm products from Southern New Jersey to other ports and to return other commodities to Salem. These commodities will move chiefly by barge through an authorized 12 foot channel which limits the full potential of the project because the most economical barge movement requires a 16 foot channel. Survey funds of $200,000 are requested to help define the most economical channel dimensions for this project which the City of Salem needs and has earned.

Delaware River at Camden, New Jersey

This project was adopted in 1910 and the remaining work is the completion of a 37 foot depth between the main ship channel and the Beckett Street Terminal of the South Jersey Port Corporation. The South Jersey Port Corporation is a State Corporation whose port facility has profited form a $30,000,000 expansion program which has taken place in recent years. This expansion was completed and a 40 foot berthing area was provided for with the expectation that the 37 foot project would be completed. Utilization of the expected 37 foot depth and high tide waters for ship movements justified the creation of a 40' berthing area. The Corps of Engineers has studied and justified the favorable benefit-cost ratio for this 37 foot approach depth in recent years.

Preconstruction planning, engineering and design have been completed by the local district office to the point where the work can be bid as soon as construction money is available. The estimated cost of completing this work is approximately $4,250,000.

This work should be done with dispatch for a number of reasons:

1. Camden, New Jersey is one of the most economically depressed areas in this nation. The South Jersey Port Corporation Terminal and similar port facilities in the area are one of the principal sources of employment for Camden. This 37 foot project will give further support for retaining and stimulating jobs in this area.
2. The full realization of the benefits from a $30,000,000 semi-public investment requires the additional depth.
3. The shoal area in front of Camden which would be eliminated by this project must be removed in the interest of safety. The most recent unsafe incident took place on February 13, 1984, when the MV "Javara" grounded on the shoal and extensive damage resulted.

New York Harbor Collection and Removal of Drift Project, NY & NJ

The New York Harbor Collection and Removal of Drift Project study was authorized in 1963. Since authorization of construction in 1974 the New York and New Jersey Waterfront Cleanup Project Coordinating Committee has worked to implement this project. This Committee consists of representatives from the states of New York and New Jersey; the City of New York; the New Jersey municipalities of Bayonne, Edgewater, Elizabeth, Hoboken, Jersey City, Newark, North Bergen and Weehawken; and the Corps of Engineers all working together to further this Waterfront Cleanup Project.

The Federally budgeted sum of $4,500,000 will constrain the progress that could be realized. The budgeted sums would provide funds for actual cleanup work at the Stapleton, Jersey City, Hoboken, Weehawken, Edgewater and Shooters Island waterfronts in addition to advanced engineering and design work for future cleanup of Manhattan, Bayonne, the Arthur Kill, New Jersey waterfronts. The estimated construction work on the various waterfronts will provide more than 600 jobs.

The actual harbor cleanup of the Bayonne, Jersey City, Weehawken, Edgewater, Brooklyn and Shooters Island waterfronts are ready to start, this will only be possible if Congress does its part in appropriating the required Federal funds. Therefore, we recommend that a total of $6,500,000 or $2,000,000 more than budgeted, be provided to take advantage of local matching funds and local interest for waterfront cleanup. This will assure the full potential of cleanup work and job generation for the Cleanup Project in Fiscal Year 1985.

Delaware River, Philadelphia to the Sea, NJ & PA

The budget figure as constituted contains sufficient funds to only continue this project in its present inadequate state. The Channel is authorized as a 40 foot project, but the controlling depths are significantly less on a regular basis.

The Delaware River supports the major petroleum refinery center on the eastern seaboard as well as port terminals in Philadelphia, Camden, Wilmington, the U.S. Steel Fairless Works Plant, and is an important project to New Jersey and the entire region.

Although this project is authorized at a 40 foot depth, in practice the controlling depth throughout the year is closer to 38 feet. Each foot of restricted draft can mean as much as $30,000 per trip to vessels using the Delaware River channel. Of the $19.8 million established in the Budget for this project, $16 million has been allocated for dredging. This will only provide maintenance at current levels with no advancement in controlling depth. Therefore, we urge that $4 million be added to assure that this project is maintained at 40 feet; as intended when the project was authorized by Congress.

Included in the Philadelphia to the Sea project is a key Delaware River anchorage-Marcus Hook. It is the only anchorage which has been constructed to its authorized 40 foot depth along the approximately 120 miles of navigable Delaware River. Marcus Hook Anchorage has depths which have deteriorated to 21 feet, and it has controlling depths of 36 feet over most of its width. $4 million is required to restore this anchorage which will allow it to function and offer the safety for which it was designed. We ask the Congress to give its approval to this urgent request.

# # #

I want to conclude this testimony by assuring you that wherever possible port recommended appropriation requests have been kept as low as feasible. Port interests are seeking appropriations for Federal waterway projects that exceed the Federal Budget recommendations by $18,050,000. We consider this request consistent with Congressional efforts to reduce unemployment and stimulate economic growth. Excessive delays in funding waterway projects cause higher port costs, loss of employment and terminal construction, and slow future economic recovery. The areas in which the above projects are located are urgently in need of economic stimulation. We hope you will favorably consider these recommendations.

Thank you

Supported by:

Maritime, Port & Civic Organizations

Delaware River Port Authority
Hudson County Chamber of Commerce & Industry (NJ)
International Union of Operating Engineers
Joint Executive Committee (PA)

New Jersey Alliance for Action
New York Sandy Hook Pilots Association
Northeast Development Coalition
PENJERDEL Council (PA, NJ, DEL)
The Delaware River & Bay Authority
The New York Towboat & Harbor Carriers Association
The Pilots Association for the Bay & River Delaware
The Port Authority of New York/New Jersey
South Jersey Port Corporation

STATEMENT OF THE JOINT EXECUTIVE COMMITTEE FOR THE IMPROVEMENT AND DEVELOPMENT OF THE PHILADELPHIA PORT AREA

IDENTIFYING REMARKS

The Joint Executive Committee for the Improvement & Development of the Philadelphia Port Area is port-affairs spokesman for twenty-three Delaware Valley civic and trade associations whose names appear at the bottom of this letterhead page. Organized in 1888, this Committee has participated in and promoted all major navigation improvements to the Delaware and Schuylkill Rivers and to the Chesapeake and Delaware Canal. The members pay no dues beyond the nominal amounts needed to cover the Organization's administrative expenses, and the Officers serve without compensation.

Our Delaware River Ports, Camden, Philadelphia, and Wilmington, identified collectively as the Ports of Philadelphia, handled approximately 54 million tons of cargo during calendar year 1983. This commerce generated more than a billion dollars into the economy of the tri-state Delaware Valley region. During 1983, the Port contributed strongly toward the United States trade balance through the export of coal, grain, automobiles, chemicals, machinery, and steel products. Seven major oil refineries; the largest refinery complex on the east coast, plus one of the Nation's largest steel mills are located along the Delaware River. In addition to the support these facilities lend to national defense, the Philadelphia Naval Base is strategically located at the confluence of the Delaware and Schuylkill Rivers. In 1983, the Ports of Philadelphia produced $295.5 million for the Federal Government in Customs Receipts; $12 million more than during the prior year.

SUMMARY

We seek an additional $8 million in O & M funding for FY 1985. The O & M funding is needed to insure that our Delaware River ship channel is improved so that deep draft vessels can rely at all times on a project depth of 40 feet as is authorized; and additionally, to provide funding where none has been provided for maintenace of Marcus Hook Anchorage - the only anchorage constructed to its authorized 40-foot depth along the 120 miles of navigable Delaware River. We also seek $4.25 million in construction funds as an add-on to the Budget for construction of the authorized and study-completed 37-foot approach channel to Beckett Street Terminal, Camden, New Jersey.

FULL TESTIMONY

The proposed FY'85 Budget provides the U.S. Army Corps of Engineers with the following amounts for the operation and maintenance of the major authorized navigation projects in our area of interest:

Delaware River, Philadelphia to the Sea	$19,885,000
Delaware River, Philadelphia to Trenton	3,815,000
Schuylkill River	1,835,000
Wilmington Harbor	3,068,000
Chesapeake & Delaware Canal	12,651,000
Total	$41,254,000

Controlling depths in our ship channels have been significantly less than project depths on a regular basis creating substantial economic loss to this region. We foresee major gaps in meeting our FY'85 navigational needs based on the level of funding provided for these projects in the President's Budget. The comments which follow address these needs:

Delaware River - Philadelphia To The Sea

Although this project is authorized at a 40-foot depth, in practice the controlling depth throughout the year is closer to 38 feet. Each foot of restricted draft can mean as much as $30,000 per trip to vessels using our Delaware River ship channel. Of the $19.8 million established in the Budget for this project, $16 million has been allocated for dredging. This will only provide maintenance at current levels with no advancement in controlling depth. We therefore urge that $4 million be added to assure that this project is maintained at 40 feet; as intended when the project was authorized by the Congress.

Included in the Philadelphia to the Sea project is a key Delaware River anchorage - Marcus Hook. It is the only anchorage which has been constructed to its authorized 40-foot depth along the approximately 120 miles of navigable Delaware River. Marcus Hook Anchorage has depths which have deteriorated to 21 feet, and it has controlling depths of 36 feet over most of its width. $4 million is required to restore this anchorage which will allow it to function and offer the safety for which it was designed. We ask the Congress to give its approval to this urgent request.

Delaware River In The Vicinity Of Camden Project

This project was adopted in 1910 and modified in 1930 and 1945. It provides for dredging to 18 feet from Cooper Point to Kaighns Point; 30 feet from Kaighns Point to Newton Creek and to 37 feet in front of the South Jersey Port Corporation's Beckett Street Terminal. The 18-foot and 30-foot portions have been completed but construction has not begun and no funds have been provided for this work in the FY'85 Budget for the 37-foot portion.

The U.S. Army Corps of Engineers has restudied the 37-foot portion and has confirmed that a need exists to construct the 37-foot approach to Beckett Street Terminal. Pre-construction planning has been completed, and we are informed that the Corps is prepared to promptly move on this vital project once construction funds are received.

Camden is one of the most depressed areas in the country. Job opportunities are practically non-existent with the exception that the Port continues to offer hope for change. The State of New Jersey has invested over $30 million in Beckett Street Terminal, including the addition of a new multi-purpose crane in recognition of its great potential for the creation of jobs in the City of Camden. Much has been done to justify this investment. Much more can be done and it now hinges largely on the construction of this 37-foot approach channel. The deepdraft vessels for which this terminal was designed are denied access to the facilities until the 37-foot project is realized. Accordingly, we ask that $4,250,000 in construction funds be added in order to accomplish this most worthy undertaking.

Wilmington Harbor

The Port of Wilmington is a substantial economic asset to the City of Wilmington, State of Delaware, and surrounding region. The Port's activities provide an estimated 1,860 jobs for area citizens and accounts for upward of $102.5 million revenue impacts for the State of Delaware. The Port represents an investment of over $50 million in both public and private funds with an additional $20 million planned for future expansion. Currently under construction is a $5 million Bulk Transfer facility for frozen citrus concentrate and a $3 million temperature controlled fruit facility. The Port of Wilmington handles in excess of 2 million tons of waterborne commerce annually and its gross revenues top $10 million. During 1983, the Port increased its volume in banana imports by 270% to become the third largest banana port in the nation.

The current level of dredging of Wilmington Harbor, and the Corps budget for this activity, is considered the minimum essential necessary to accommodate the existing trade and that of the immediate future.

Delaware River - Philadelphia To Trenton

In 1966, the Philadelphia Port Corporation and other Port interests requested the construction of a turning basin and maneuvering area in the vicinity of the planned but now operating Tioga Marine Terminal, just north of Allegheny Avenue. Tioga Marine Terminal was completed in 1971. The recommendation was for the continuation of the 1,000 foot wide channel north of Allegheny Avenue for approximately one mile with an enlargemnet of the width to approximately 1,200 feet - 1,400 feet above the midsection of the extension to provide an adequate area for turning and maneuvering.

Only minor construction remains, primarily in the turning basin area. We have repeatedly asked the Federal Government to complete the construction and assume maintenance of the maneuvering area and turning basin but this work is not even scheduled. The City of Philadelphia is justly concerned that this terminal, which was constructed at a cost of $31 million and is now valued at more than $100 million, is prevented from reaching its design potential.

The failure to resolve disposal area problems has precluded progess on this project. The Corps is completing a $1,500,000 disposal area study for the Delaware River. This study has been a disappointment in that it has not provided a solution to the Tioga Turning Basin area problem. We ask that you request the Corps to find a workable solution.

Delaware River Comprehensive Navigation Study

We are most interested in seeing the completion of the Schuylkill River study on a proposed channel deepening from 33 to 37 feet. The Schuylkill River project is a tributary project to the 40-foot authorized channel in the Delaware River. The annual export of approximately three million tons of grain to foreign ports is a significant asset to our region and to our balance of payments. This trade is limited in foreign competition by the authorized 33-foot depth whereas our competitors enjoy project depths of 40 feet or more. This limitation can have a penalty of as much as $100,000 per foot of draft. The benefits of a deeper channel are significant, and the costs of deepening the channel to the grain facility are comparatively low. The Corps has been working on this study for over six years. We urge that the Corps be directed to complete this study as the first priority in our region during FY 1985.

We endorse the budget allocations of $610,000 for continuation of the Comprehensive Navigation Study of the Delaware River. We are most anxious to complete the study of the deepwater port potential of lower Delaware Bay in addition to completion of the Schuylkill River study.

The Atlantic Seaboard is in need of a modern deepwater port. None now exists. As a nation, we should have depths at our port facilities which are consistent with depths at overseas ports so that the maximum economies of waterborne transport can be attained. Delaware Bay is blessed with natural 55-foot depths which are now used to lighter in excess of 10 million tons of cargo a year. This natural asset must be studied to determine its full potential when improved. We urge that the Corps complete this study in FY'85.

In conclusion, we do not consider our requests unreasonable. As confirmed by the $295.5 million in Customs Receipts collected at our Ports, the Federal Government is enjoying a ten to one benefit ratio for its annual investment in channel maintenance. We view with dismay those efforts currently circulating to impose user fees on an activity which is clearly paying more than its own way!

Thank you for your kind consideration.

STATEMENT OF JOHN J. MCGARRY, VICE PRESIDENT, PENJERDEL COUNCIL

INTRODUCTION AND SUMMARY

The PENJERDEL Council is a regional association of commerce, industry, and the professions with membership throughout the tri-State, Delaware Valley area. The council is concerned with the economic development of the Delaware Valley region which includes 11 counties in segments of 3 States: New Jersey, Pennsylvania, and Delaware.

To conserve your time, I offer for the record the full testimony embodied in this statement, which provides background information to support our conclusions and recommendations.

Forty-foot channel.—Our primary concern is the fact that we have been suffering with inadequate maintenance of the authorized 40-foot channel. The channel has been authorized for a 40-foot depth and there are billions of dollars worth of investments along the three-State waterfront which rely on the mandated 40-foot channel. We urge that the Corps of Engineers be directed to do the proper level of channel maintenance and the funds required therefore be provided.

Anchorages.—We are further concerned that the President's budget contains no funds for the maintenance of the Delaware River anchorages.

Tioga turning basin.—No work has been scheduled for the completion of the Tioga turning basin. This project is necessary to expand the export coal and other cargo from the Delaware River. The failure to resolve disposable area problems has precluded progress on this project. We urge that the Corps be directed to find a solution to this problem.

Camden waterfront.—The Camden waterfront is an authorized project which has not been completed. We urge that the Corps be directed to complete a clear 37-foot approach so that the full authorized depth will exist at the Camden Waterway, Delaware River, in the near future.

On behalf of the PENJERDEL Council, we very much appreciate this opportunity to be heard.

Delaware River—Philadelphia to the sea.—The budget figure as constituted only contains sufficient funds to continue this project in its present inadequate state. The channel is authorized as a 40-foot project, but the controlling depths are significantly less on a regular basis.

The South Jersey Port Corp. has completed a $40 million expansion, the Philadelphia Port Corp. is undertaking a new $10 million port facility at Hog Island in Philadelphia, and the Holt Corp. has undertaken a new $25 million port facility in Gloucester City, N.J. A multimillion dollar roll on-roll off facility was constructed at Pennsauken, N.J., which provides scheduled weekly service to Puerto Rico and return. In short, there is growth being provided by the private sector and these local endeavors need the support of the 40-foot mandated channel.

Local interests have for approximately 6 years been attempting to get the Corps of Engineers to complete studies at the Camden waterfront and at the Schuylkill River. We urge your assistance to obtain completion on these projects.

Camden waterfront.—The South Jersey Port Corp. has spent over $40 million on new port facilities which can accommodate vessels up to 40 feet in depth at their berths. The Camden waterfront is an authorized project which has not been completed. The full realization of the benefits from a $40 million South Jersey Port Corp. investment requires the additional depth. We urge that the Corps be directed to complete a clear 37-foot approach so that the full authorized depth will exist at the Camden Waterway, Delaware River, in the near future.

Schuylkill River.—There is a $500 million a year grain export business in Philadelphia near the mouth of the Schuylkill River where the authorized channel depth is 33 feet. Exporting of grain has become an increasing business in the last several years which is of benefit to our farmers, our foreign trade balance, and to our waterborne commerce. The Philadelphia grain facility is forced to compete with a 33-foot channel on the Schuylkill River, whereas competitors enjoy 40 feet of water. One foot of draft can have an economic significance of $100,000 per trip in this trade. A 40-foot channel to the grain facility on the Schuylkill River would cost several million dollars and the benefits would appear to multiply the annual costs. Again, the Corps response to our querys on this project over the last 5 years (approximately) has been a repetition that the studies underway have not been completed. We urge that the Corps be directed to complete this study.

Disposal areas.—Crucial to the continued maintenance of the Delaware River and its tributaries, such as the Schuylkill River and Wilmington Harbor, are the requirements for disposal areas to receive dredged material. In this connection, PENJERDEL Council urges that Congress direct the Corps of Engineers to complete the disposal area study.

Port of Wilmington, Del.—The Port of Wilmington is a substantial economic asset to the city of Wilmington, Del., and surrounding region. The port's activities provide an estimated 1,860 jobs for area citizens and accounts for upward of $102.5 million revenue impacts for the State of Delaware.

The current level of dredging of Wilmington Harbor, and the Corps budget for this activity, is considered the minimum essential necessary to accommodate the existing trade and that of the immediate future. It is urged that the additional capability for dredging be provided.

Delaware River anchorages.—We are further concerned that the President's budget contains no funds for the maintenance of Delaware River anchorages.

The center of maximum waterborne commerce activity is at Philadelphia, Pa., Camden, N.J., and Marcus Hook, Pa. These centers are served by the Mantua Creek and Marcus Hook anchorages. It is not possible to safely sustain a high level of waterborne commerce without providing adequately maintained anchorages. These anchorages are subject to steady shoaling and consistent maintenance is required to maintain reasonable depths.

Tioga turning basin.—No work has been scheduled for the completion of the Tioga turning basin. This project is necessary to expand the export coal and other cargo from the Delaware River. The failure to resolve disposable area problems has precluded progress on this project. We urge that the Corps be directed to find a solution to this problem.

Senator MATTINGLY. Would you supply for our committee not only the recommendations that are in the budget currently, our budget, but also the add-ons that you are referring to?

Captain IVES. Yes, sir.

Senator MATTINGLY. Can you supply that for us?

Captain IVES. They will be part of our formal testimony.

Senator MATTINGLY. Thank you.

Mr. McSwean from the Tri-Rivers Waterway Development Association.

Mr. McSwean, would you like to introduce the people you brought with you? You can put your full statement in the record and give us a summary.

APALACHICOLA-CHATTAHOOCHEE-FLINT WATERWAY

STATEMENT OF R. H. McSWEAN, TRI-RIVERS WATERWAY DEVELOPMENT ASSOCIATION

ACCOMPANIED BY:

BAXTER HARCOURT, MEMBER, GEORGIA PORTS AUTHORITY

ADDIE SUMMERS, EXECUTIVE DIRECTOR, TRI-RIVERS WATERWAY DEVELOPMENT ASSOCIATION

Mr. McSWEAN. Thank you, Senator.

Addie Summers is our executive director, one of your constituents from Columbus, Ga. We are proud to have Baxter Harcourt in our organization. He is one of our directors and vice president of our organization. As you already know, he serves on the Georgia Ports Authority.

We are proud to have the support of your State for many years.

Senator MATTINGLY. Thank you.

Mr. McSWEAN. In the leg work and finances.

I have a short statement, if it would be all right, I would like to submit this. Mr. Harcourt has a statement he wants to submit for the record.

Senator MATTINGLY. Fine.

Mr. McSWEAN. I am R. H. McSwean, immediate past president of the Tri-River Water Development Association, headquartered in Dothan, Ala. Of course, with me is Baxter and Addie Summers, our executive director. We welcome this opportunity to meet with you again.

You have continued to support our efforts through some difficult times, and we want to thank you for this and appreciate the confidence you have placed in us.

You may remember that the ACF Waterway has been challenged in recent years for its high maintenance costs in relation to ton-miles of cargo carried. There have been very real reasons for both the high cost and the low tonnage. With the correction of these factors, we believe—and you have supported us in that belief—that the ACF Waterway will not only justify itself but prove a wise and profitable investment.

The first need is for a dependable year-round shipping channel—the 9-by-100-foot channel authorized by Congress in the Rivers and Harbors Acts of 1945–46. You took a big step toward filling that need when you appropriated funds last year to relocate the rock outcroppings which had hampered barge traffic through the Apalachicola River for several years.

The rock relocation cost an excessive amount—$1,974,000—partly because of demands placed on the Corps of Engineers by local interests and environmental groups, and there is still more work to be done, at an estimated additional cost of $200,000.

We believe the improvement will be worth the cost and effort. Corps spokesmen have assured us it will allow them to provide the authorized channel 90 percent of the time.

Division Engineer Gen. Forrest T. Gay told a group of 230 community leaders meeting in Eufaula, Ala., recently that the rock relocation had increased the Corps' tonnage projections for this waterway by a factor of 5. Expressions of interest by prospective shippers have picked up by at least that amount, and our association is now redirecting our efforts from channel improvement back to our original goal, orderly development. Port managers and towboat operators all report an unprecedented number of inquiries since the rock relocation was announced. The Georgia Ports Authority alone has signed up six new shippers for its ports and Columbus and Bainbridge.

So you have given us a chance to make the ACF Waterway pay off for southeast Alabama, southwest Georgia, and northwest Florida by financing the rock relocation.

The system still will need good maintenance. The States of Alabama, Georgia, and Florida need to work out some problems, come to some agreements, and develop a mechanism for working together and with the Corps. They have moved in that direction through the creation of an interim coordinating committee involving the Corps and agencies of the three States. The ICC, as it has come to be called, has a list of specific tasks to perform. It will complete these and go out of existence in October 1985.

The work being done by the ICC—such as compiling and culling data and preparing an interim water assessment—is fundamental in nature. Ideally, it should provide the bases for creating plans which the Corps would follow in managing the resource and which the States would accept.

The Corps has authorization for a broad, basinwide, 308 study which is not now being used—this study was discontinued during the mid-1970's, when negotiations among the States seemed hopelessly deadlocked. We are glad to see that the Corps now wants to resume the 308 study and that the President has included in his proposed fiscal year 1985 budget $250,000 for that purpose. It will supplement and extend the ICC effort along lines acceptable to all three States.

The President's budget also includes sufficient amounts for operation and maintenance of the navigation channel and the four multipurpose dams on the system. We support the President's recommendations for the ACF Waterway and respectfully request Congress to appropriate funds as proposed: ACF Waterway study, $250,000; the operation and maintenance of the waterway and George W. Andrews lock and dam, $4 million-plus; Jim Woodruff lock and dam, $3 million-plus; West Point Dam, $3 million-plus; and Buford Dam, $4 million-plus.

We thank you.

Senator MATTINGLY. Thank you.

Any other comments?

Mr. HARCOURT. For the record, I am Baxter Harcourt. I live in Columbus, Ga. I am a member of the Georgia Ports Authority and vice president of Tri-River Waterways Association representing my part of the State of Georgia on that association.

I have already tendered a statement for the record. I would like to bring to your attention one thing that we are involved now with Tri-Rivers, that is Georgia Ports Authority, in retaining years to do a study on the entire basin so the various chambers of commerces will have a tool to use in promoting this region, thus, increasing the amount of shipping and potential shipping on the system.

Actually, the Georgia Legislature appropriated $25,000 this session toward that study. Tri-Rivers Waterway had taken the initiative and has led the way by appropriating $40,000. This past Monday in your hometown of Brunswick, the Georgia Port Authority voted to spend $50,000 on that study. As you well know, the Georgia Ports Authority is well committed and has been for a number of years to the Tri-River Waterway system and we have confidence in it. In fact, the State of Georgia has invested in excess of $13 million in the two facilities at Bainbridge and Columbus. Now through the cooperation of this committee under Secretary of the Army Gianelli and Governor Graham of Florida and his associates there, we have finally realized and completed the task of relocating the rocks. We feel like we are all working in harmony now and we look forward to developing this river and ask this committee to please give us continued support by appropriating, recommending to the Congress maintenance money for the project.

Thank you so much.

Senator MATTINGLY. Thank you.

I was just in Bainbridge Saturday night, by the way. Thank you all very much.

[The statements follow:]

STATEMENT OF R. H. MCSWEAN, IMMEDIATE PAST PRESIDENT, TRI-RIVERS WATERWAY DEVELOPMENT ASSOCIATION

Thank you, Mr. Chairman and members of the subcommittee.

I am R. H. McSwean, immediate past president of the Tri-Rivers Waterway Development Association, headquartered in Dothan, Ala. With me are Baxter Harcourt, vice president for Georgia, and our executive director, Addie Summers.

We welcome this opportunity to meet with you again and to report some progress at last on the Apalachicola-Chattahoochee-Flint Waterway. You have continued to support our efforts through some difficult times, and we want you to know we appreciate that confidence.

You may remember that the ACF Waterway has been challenged in recent years for its high maintenance costs in relation to ton-miles of cargo carried. There have been very real reasons for both the high cost and the low tonnage. With the correction of these factors, we believe - and you have supported us in that belief - that the ACF Waterway will not only justify itself but prove a wise and profitable investment.

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The President's budget also includes sufficient amounts for operation and maintenance of the navigation channel and the four multi-purpose dams on the system. We support the President's recommendations for the ACF Waterway and respectfully request Congress to appropriate funds as proposed:

ACF Waterway Study ---------------------$250,000
Operation and Maintenance of the ACF Waterway and George W. Andrews Lock and Dam ------4,060,000
Jim Woodruff Lock and Dam --------------3,730,000
Walter F. George Lock and Dam ----------3,921,000
West Point Dam -------------------------3,249,000
Buford Dam -----------------------------4,706,000

Thank you.

STATEMENT OF H. BAXTER HARCOURT, MEMBER, GEORGIA PORTS AUTHORITY

I am H. Baxter Harcourt, a member of the Georgia Ports Authority, Vice Chairman of the Tri-Rivers Association and one of the 500,000 Georgians living within the 19,000 square mile Tri-River Basin.

I am here to concur with my colleagues of the Tri-Rivers Association on their request for appropriations and I am here to compliment this Committee, on the eve of our fourth decade of negotiations for generating the necessary funding to provide us with a river system that is environmentally sound and commercially feasible.

The stewardship of the river system is a delicate and an awesome responsibility shared by all who enjoy its benefits.

The Interim Coordinating Committee with representation from the states of Alabama, Georgia, Florida and the U. S. Corps of Engineers, is a product of this stewardship.

The Committee will lay the groundwork for the forthcoming U. S. Corps of Engineers 308 Study by establishing an interim drought management plan, prepare a navigation maintenance plan, and present recommendations for an interstate mechanism to coordinate the mangement of the Basin's water resources.

The Corps 308 Study will, I believe, establish the guidelines for the harmonious development of the River system allowing us to tap this living resource while nurturing and preserving it for generations yet to come.

In fulfilling its mission of developing a water transport system for the State of Georgia, the Georgia Ports Authority has established inland ports at Bainbridge and Columbus, Georgia, which represent an investment in excess of 13 million dollars.

The twenty years that have passed since the dedication of these inland barge terminals have been years, not of progress, but two decades of survival.

The Corps removed the last obstacle from the Apalachicola River in February of this year giving us a clear channel to the Gulf. At this time, the Trade Development Division of the Ports Authority was into the third month of notifying shippers and potential shippers of the availability of a viable nine foot channel. This effort continues with personal contact, direct mail, and media saturation. A typical response on receiving news of the channel improvement is a letter from Ned L. Hoover, Executive Vice President, ST Services, a Grace Company, Dallas, Texas. (Copy attached).

Tonnages for the first quarter of calendar year 1984 at our inland terminals at Bainbridge and Columbus have reached 61 percent of the total handled in 1983.

Since the first of the year, five new accounts at Bainbridge and one at Columbus have scheduled combined tonnages of 104,700 tons annually.

One of the new shippers at Bainbridge has purchased the 1984 corn harvest from 10,000 acres of local farm land which will be barged from Bainbridge and shipped to Japan. We like to think of this as our own PIC program - we spell it P-I-C, Payment In Cash!

Correctly anticipating a sudden surge in tonnage with the opening of the channel, the Authority was ready for the influx of new cargo with some one quarter of a million dollars in expanded facilities in place or nearing completion. Additional expansion plans to keep pace with tonnage increases are now on the drawing board.

The Georgia Ports Authority has initiated and is participating with the Tri-Rivers Association and the Georgia Department of Industry and Trade in a $110,000 independent consultant's Industrial Development Study of the Apalachicola-Chattahoochee-Flint River Basin.

The study will consist of three parts:

Phase I - Identify industries that are now using or could potentially use the ACF River System.

Phase II - An evaluation of the economic impacts associated with each industry, both current and potential, and provide forecasts of current and potential cargo on the ACF River System.

Phase III - Develop a strategic marketing plan which will detail the steps required to market the ACF River Basin to potential users.

These are the efforts being exerted by the Georgia Ports Authority to increase the tonnage on the River System. Our efforts are being multiplied many fold by our counterparts in the tri-state area and private industry.

LETTER FROM NED L. HOOVER, EXECUTIVE VICE PRESIDENT, ST SERVICES, DALLAS, TEX.

February 28, 1984

Mr. H. Baxter Harcourt
Georgia Ports Authority
P. O. Box 629
Columbus, GA 31902

Dear Mr. Harcourt:

We received today a copy of the Georgia Ports Magazine with the article on the rock removal and its effects, and we appreciate receiving this valuable information.

We would like to add our "Amen" to those positive comments of others. For the first year after ST acquired the Whittaker terminal at Columbus in 1981, our tankage occupancy was at about 10%. This occupancy criteria is very basic in our business because of the high fixed costs involved in the terminalling business.

I am pleased to report that at this writing, tankage occupied at Columbus exceeds 90% in a period when third-party storage occupancy generally, nationwide, is on the decline. The major portion of this increased activity can be directly attributed to the prospect of more reliable 9' water depths and the widening which is occurring.

It is also my opinion that "we ain't seen nothing yet".

The increased activity has not only led to increased security for our existing full-time employees, but has permitted us to add one full-time position recently, which was filled from the local work force and has had a very strong effect upon our recent decision to relocate our Eastern Regional Manager from Peru, Illinois to Columbus.

We are cautiously optimistic that before the end of 1984, we will be requesting funds for construction of additional storage at Columbus.

Yours very truly,

Ned L. Hoover
Executive Vice President

FEDERAL POWER AND RELATED PROGRAMS

STATEMENT OF BOB BERGLAND, EXECUTIVE VICE PRESIDENT AND GENERAL MANAGER, NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION

Senator MATTINGLY. Next will be Bob Bergland, executive vice president and general manager, National Rural Electric Cooperative Association.

I have your statement. Having been familiar with the government for many years, I am sure you are going to put that in the record, aren't you?

Mr. BERGLAND. Mr. Chairman, I am asking the statement be included in the record. I will give a very brief summary.

Senator MATTINGLY. Thank you very much.

[The statement follows:]

STATEMENT OF BOB BERGLAND, EXECUTIVE VICE PRESIDENT AND GENERAL MANAGER, NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION

Mr. Chairman, my name is Bob Bergland, Executive Vice President and General Manager of the National Rural Electric Cooperative Association (NRECA). NRECA is the national association of over 1000 rural cooperatives which supply central station electricity to some 25 million people in the rural areas of 46 states.

NRECA supports the FY 1985 budget request for the Corps of Engineers, the Bureau of Reclamation, Department of Energy's power marketing agencies, and other DOE energy programs. Our support of the cost-sharing proposals set out in the Bureau and Corps' programs is conditioned on the criteria enunciated by the NRECA, the American Public Power Association, Colorado River Energy Distributors Association, and the Mid-West Electric Consumers Association in the attached statement submitted to the Water and Power Committee of the Interior and Insular Affairs Committee on March 5, 1984. We also support DOE's nuclear programs for safety, breeder reactor systems, nuclear waste disposal, completing the fuel cycle, and high temperature gas reactors. NRECA emphasizes the need for:

- $5.8 million for new construction starts of the Corps of Engineers and the Bureau of Reclamation
- $7.6 million for Fryingpan-Arkansas Project, Colorado
- $93.5 million for the Central Valley Project, California, including $3.5 million for Auburn-Folsom, and $4.5 million for New Melones Dam
- $27.0 million for the Richard B. Russell Dam, Georgia-South Carolina
- $53.6 million for Garrison Irrigation Project, North Dakota
- $7.4 million for Harry S. Truman Dam, Missouri
- $2.4 million for Gregory County Pump Storage, South Dakota
- $188.0 million for Central Arizona Project, Arizona
- $105.0 million for the Bonneville Unit of the Central Utah Project, Utah
- $53.2 million for Columbia Basin and other Pacific Northwest projects; $9.0 million for Second Power Plant at Bonneville Dam, and $13.0 million for additional units at Chief Joseph
- $5.5 million for Atmospheric Water Resources Management
- $323.6 million for the five Federal power marketing agencies
- $466.1 million for the nuclear programs
- $52.0 million for modular and integrated high temperature gas reactors and $4.5 million for thorium recycle and spent fuel treatment
- $473.4 million for other energy R&D programs

At our 42nd annual meeting in San Francisco in January 1984, our members again unanimously passed resolutions supporting appropriations for a number of water resource and hydroelectric projects throughout the United States. NRECA encourages the Congress to fund studies for hydroelectric power development and comprehensive water resource projects.

New Construction Start

NRECA supports the FY 1985 budget to provide $2.8 million for new construction starts by the Bureau of Reclamation and $3.0 million by the Corps of Engineers. We are willing to examine the Administration's proposals to provide new hydroelectric facilities by entering into joint financial ventures with the states and local entities. We intend, as this Subcommittee and the Congress has done, to examine each new proposal on a project-by-project basis. Our attached statement to the Interior Committee sets out our concerns, the reasons therefor, and the basic criteria which must be met for project approval. The criteria are:

1. The preference rights of local public power systems and rural electric cooperatives be fully protected.

2. The Federal Government retain control over project selection, development and operation.

3. The power produced be marketed through the Federal power marketing administrations.

4. The power be developed and marketed at the lowest possible cost.

Fryingpan-Arkansas Project

We support the appropriation of $7.6 million in FY 1985 for the Bureau of Reclamation's Fryingpan-Arkansas Project to complete the Mt. Elbert pumped storage power plant facilities, and to continue work on recreation, fish and wildlife facilities.

Central Valley Project

We support the appropriation of $93.5 million in FY 1985 for the Central Valley Project, including $4.5 million for New Melones Dam. Additionally, $3.5 million is for the Auburn-Folsom South Unit which has a potential of 300 MW of hydroelectric power with the possibility of an additional 400 MW for pumpback units. No allowance was made in the budget; nonetheless, we request that additional funds be appropriated for the Bureau of Reclamation to begin construction of Auburn Dam.

Richard B. Russell Dam

Funds in the amount of $27.0 million should be appropriated in FY 1985 for continued construction of the Richard B. Russell Dam Project on the Savannah River between Georgia and South Carolina. It will provide 300 MW of needed base load hydroelectric power and 300 MW of pumpback units, thereby increasing the power plant capacity to 600 MW.

Garrison Irrigation Project

We support $53.6 million in FY 1985 to provide funds for the New Rockford Canal, distribution system for the Oakes Test Area, the Lone Tree Dam, and other associated facilities.

Harry S. Truman Dam and Reservoir

We support the appropriation request for $7.4 million in FY 1985 to continue construction at the Harry S. Truman Dam and Reservoir which will enable the use of the full hydroelectric potential at this valuable project.

Gregory County Pump Storage

We support the FY 1985 appropriation request for $2.4 million for the continuation of survey work at the Gregory County Pump Storage site.

Central Arizona Project

We urge the Subcommittee to appropriate $188.0 million required in FY 1985 to continue the orderly construction of the Central Arizona Project which is vital to the water supply for the State of Arizona. This would provide for the delivery of water to Phoneix as scheduled.

Bonneville Unit, Central Utah Project

We request that the Subcommittee appropriate $105.0 million in FY 1985 for construction of the Bonneville Unit of the Central Utah Project which has a potential of 144 MW of hydroelectric power.

Columbia Basin and Other Pacific Northwest Projects

We support FY 1985 appropriations of $53.2 million for the Columbia Basin Project, including river basin stabilization below the Third Powerhouse at Grand Coulee, $13.0 million for Chief Joseph power plant additions, and $9.0 million for the Second Power Plant at Bonneville Dam.

Atmospheric Water Resources Management

We support the FY 1985 $5.5 million request to continue the cloud seeding technology being developed by the Bureau of Reclamation to increase water supplies in the arid West.

Federal Power Marketing Agencies

NRECA supports the $323.6 million for FY 1985 appropriation request for Federal power marketing agencies: $248.3 million for the Western Area Power Administration, $35.8 million for the Southeastern Power Administration, $36.3 million for the Southwestern Power Administration, and $3.2 million for the Alaska Power Administration. We also support the Bonneville Power Administration's $298.7 million budget funded through its self-financing revolving fund procedures. We suggest that similar revolving funds for the other marketing agencies would be desirable and support proper legislation to achieve this end.

The five power marketing agencies continue to do well in carrying out their programs. They continue to market power from Federal projects to encourage widespread use in accordance with preference laws. At the same time, power is sold at rates which recover all costs--interest, amortization, operation and maintenance over the project repayment period as established by the Congress.

Nuclear Programs

Our association has resolutions supporting nuclear power and nuclear research programs. We request the Subcommittee to provide funds for the FY 1985 budget request of $466.1 million for nuclear programs. These funds are vitally needed to continue development of nuclear technology for improved safety, waste management, fuel processing, reactor standardization and other improvements. This advanced technology is essential for continued development and maintenance of a viable nuclear industry and to support the on-going nuclear power program which last year provided over 13 percent of our nation's electrical needs. We urge the Subcommittee to provide all the funds requested and especially wish to support the following programs;

- o $308.1 million for breeder reactor systems
- o $13.3 million for nuclear waste technology
- o $83.6 million for converter reactor systems
- o $27.6 million for civilian waste research and development
- o $33.5 million for advanced nuclear systems

High Temperature Gas-Cooled Reactors

We request that the Subcommittee provide $52.0 million, an increase over the budget of $17.0 million for the modular and integrated HTGR. Additionally, we recommend $4.5 million (currently unbudgeted) for thorium recycle and spent fuel treatment which we understand is necessary to complement the modular and integrated HTGR program.

NRECA is a member of the Gas-Cooled Reactor Associates (GCRA). Its constituency represents one-third of the installed power resources of the country. Since 1978 the GCRA staff, supported solely by utility funds, has been conducting HTGR concept evaluations, project development activities and program integration support services to the Department of Energy.

The appropriations requested will support the study of the need for smaller, less complicated nuclear power plants. One alternative being studied is a 1170 MWt/425 MWe design.

A second alternative being studied is an HTGR modular reactor system of approximately 250 MWt/100 MWe that can be constructed as a cluster of modules or sequentially constructed in a much reduced time period. Such modules, if they can be economically developed, would allow a utility system to more closely match its load growth requirements, and consequently reduce utility cash flow needs. Additionally, if these smaller units could be factory manufactured, the opportunity exists for greatly improving quality control and quality assurance. Moreover, a production line manufactured and standardized unit holds great potential for reducing regulatory requirements.

The intent of this program is to determine if it is feasible to achieve greater safety, provide smaller more easily licensed units which are economic and competitive with the larger reactors being built today. It is my judgment that if such a modular system proves practical and becomes a reality, many electric utility systems when faced with the prospect of building new plants will give serious consideration to the nuclear option, an option I happen to feel is imperative to the energy security and economic viability of this country. Consequently, it is an option we can ill afford to lose.

Other Energy R&D Programs

Finally, Mr. Chairman, we support $473.4 million for the other utility-related programs in the Department of Energy, among which are research and development funds for conservation, solar and other renewables, electric energy and storage systems, coal liquefaction, fuel cells, magnetohydrodynamics, heat engines, combustion systems, and others. Testimony on the need for these items has been submitted by Lowell Endahl, Manager of Energy Research and Development, of our staff. A copy of his testimony dated March 7, 1984 is attached for the Subcommittee.

It is a real pleasure to be with you today and I thank you for this opportunity to testify in support of these vital programs.

JOINT STATEMENT OF AMERICAN PUBLIC POWER ASSOCIATION, NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION, MID-WEST ELECTRIC CONSUMERS ASSOCIATION, INC., AND COLORADO RIVER ENERGY DISTRIBUTORS ASSOCIATION

March 6, 1984

This statement, supporting Title I of H.R. 4275 as introduced, a bill to authorize the Secretary of the Interior to construct, operate, and maintain seven hydroelectric powerplants at various existing water projects, is submitted on behalf of the American Public Power Association, the National Rural Electric Cooperative Association, Mid-West Electric Consumers Association, Inc. and the Colorado River Energy Distributors Association. These national and regional organizations represent consumer owned electric utilities throughout the United States.

The American Public Power Association (APPA) is the national service organization representing over 1,750 local public power systems located in 49 states.

The National Rural Electric Cooperative Association (NRECA) is a nonprofit national service organization for some 1,000 rural electric cooperatives which provide central station electricity to nearly 25 million consumers in 46 states.

The Mid-West Electric Consumers Association (Mid-West), is a non-profit membership corporation. It is the regional service agency of more than 300 rural electric cooperatives and consumer-owned electric utilities serving more than 3,000,000 customers in the nine states served by the Pick-Sloan Missouri River Basin Program and associated federal power developments. Mid-West's members are substantial purchasers, either directly or indirectly, of federally-generated power marketed by the Western Area Power Administration.

The Colorado River Energy Distributors Association (CREDA) is a non-profit membership corporation comprised of preference customers, preference customer organizations and state agencies located in the Colorado River Basin states. CREDA represents preference customers that purchase over ninety percent of the Colorado River Storage Project power and energy that is marketed by Western Area Power Administration.

Title I of H.R. 4275

As introduced, Title I of H.R. 4275 authorizes the construction of seven powerplants at existing dams in the West. Under Section 105(a), power generated at the facilities "shall be marketed through existing Federal hydroelectric power marketing programs in accordance with existing law." This means that power will be marketed by the Federal power marketing administrations under the preference laws at cost-based system-wide rates.

Our organizations have an obvious interest in Title I of H.R. 4275 since public power systems and rural electric cooperatives are entitled to a preference in buying power produced at federal dams. Section 105(a) maintains the current preference laws, and APPA, NRECA, CREDA and Mid-West fully and strongly support it.

However, the Bureau of Reclamation has urged the Water and Power Resources Subcommittee to adopt a package of amendments which, from former Commissioner Broadbent's (now Assistant Secretary of the Interior) testimony on November 17, appear to be identical with the amendment package he had earlier proposed unsuccessfully to the Senate Committee on Energy and Natural Resources when he testified on S. 268, the Senate companion to H.R. 4275. So far as we are aware, the actual text of the proposed amendments has not been provided to this Committee. Nevertheless, we believe it is clear that the Bureau's amendment package would effectively eliminate preference in the sale of power from those projects authorized in Title I.

In his testimony before this Subcommittee, Mr. Broadbent described the amendment package as follows:

> Because of the significant interest in the non-Federal development of hydroelectric power at many Bureau of Reclamation facilities, we recommend that the first section of H.R. 4275 also be amended to allow non-Federal participation by authorizing the

Secretary of the Interior, in consultation with the Secretary of Energy, to enter into contracts with non-Federal entities for the sharing of the costs of powerplant development and the sharing of the revenues or power resulting from such development. We propose an amendment to implement this which is similar to section 107, title I, Public Law 97-293, an Act to authorize Buffalo Bill Dam and Reservoir modifications. Our proposed amendment would allow us to work closely with the Department of Energy in strengthening this Administration's partnership with the States and other non-Federal sponsors in hydropower development.

* * * *

Section 105(a) of the bill would require that all power generated by facilities constructed pursuant to the legislation be marketed through existing Federal power marketing programs. Section 105(b) would categorize the powerplants under specific marketing programs.

Our first proposed amendment to section 105(a) of H.R. 4275 would provide authority to the Secretary of Energy to distribute energy to the non-Federal entities that contribute funds to the project, and protect the Secretary of the Interior's authority to utilize energy from Federal hydroelectric projects, or those partially funded by the Federal Government, for Reclamation project purposes. This would change the current requirement under section 9(c) of the Reclamation Project Act of 1939, that preference in the sale of electric power or the lease of power privileges be given to municipalities, public corporations or agencies, and cooperative and non-profit organizations financed by loans under the Rural Electrification Act. Our proposed amendment would eliminate that restriction only for projects authorized under this Act and permit the distribution of energy to any entity that provided funding.

Our second proposed amendment to section 105(a) (which we would designate as section 105(b)) would provide that preference customers be given priority for selection as the powerplant developer, provided that the proposal by the preference customer meets or exceeds other proposals in conserving and utilizing the water resources in the public interest.

Our proposed amendment to section 105(b) (which we would redesignate as section 105(c)) would limit the amount of energy available for marketing to the amount remaining after energy is delivered to entities providing project funding and for Reclamation project uses.

In essence, any entity, public or private, advancing construction funds will receive, at its option (not the government's), either power or revenue without regard to preference laws.

As evidenced by the attached statement submitted to the Bureau of Reclamation on February 6 at a seminar on alternative financing options, APPA, NRECA, CREDA and Mid-West have closely examined alternative financing schemes and have given much thought to alternative means of financing federal projects.

Our paramount concern in any such scheme is the preservation of preference rights of local public power entities and rural electric cooperatives. The preference concept is based on the principle that the Nation's water resource belongs to the people and the benefits of this resource should be distributed directly to the people whenever possible. Preference achieves that goal. In addition, it promotes competition within the electric utility industry. The preservation of preference is essential to preserve the prosperity of the consumer owned utility movement in this country. For these reasons, we urge the committee to reject the Bureau of Reclamation's Title I amendment package.

Our position on non-Federal financing is explained in more detail in the attached statement. In summary, our organizations have measured various non-Federal financing according to the following criteria:

1. Will the preference rights of local public power systems and rural electric cooperatives be fully protected?
2. Will the federal government retain control over project selection, development, and operation?
3. Will the power produced be marketed through the federal power marketing administrations?
4. Will power be developed and marketed at the lowest possible cost?

Presumably, former Commissioner Broadbent's cost-sharing amendments are based on concerns about federal deficits and federal spending. However, this is a short sighted approach which fails to recognize that preference customers have been successfully sharing the costs of federal projects for decades. Under the traditional approach, preference customers repay the federal investment plus interest, in full, while the project and the public resource remains totally within the control of the federal government.

Without question, preference does not mean less than cost-based rates. The government fully recovers its costs. Power from federal projects is sold by the power marketing agencies (PMA's) to preference customers at rates which must cover all costs expended by the federal government, including interest, amortization and maintenance of power facilities over a period of not to exceed 50 years.

Preference customers are 100 percent cost-sharers in multiple-purpose hydroelectric power projects. Indeed, preference customers often pay more than the cost of a project's power features since under reclamation law they also pay, in addition, substantial amounts toward repayment of costs allocated to irrigation features of projects. We have supported, and continue to support this role for hydropower generated at federal projects.

We object, however, to indiscriminately lumping power, which pays its way 100%, with other functions, for example, navigation and flood control, the costs of which traditionally have been largely borne by the taxpayers as a whole, rather than by project beneficiaries. This gives rise to the impression that power users are not carrying their full burden. That is obviously not the case.

Elimination of Preference

As former Commissioner Broadbent admitted in his statement before this Subcommittee, the Administration's non-

Federal financing amendment would eliminate preference in the sale of power from those projects authorized in Title I of H.R. 4275. Power would not be sold according to preference law, but rather to whichever entity advanced the money. We quote a question put to the Bureau by Representative Cheney in a letter to the Commissioner dated November 30, and the Bureau's response:

> Your testimony acknowledges that if your proposal for non-Federal participation in the facilities proposed under Title I were accepted, this would alter the historic "preference" requirement of Reclamation law. I note that Section 107 of the Buffalo Bill Dam legislation, which you cite as a model, calls for participation by the State of Wyoming, not by private entities, in that development. If the substantial modification (some might say elimination) of the "preference" requirement which you propose is appropriate in this legislation, would this set a precedent for all future hydropower legislation? Is there any provision in your proposal which would prevent a private developer from acquiring most or all of the hydropower which would become available under this bill? If not, what is the continued justification for this type of Federal legislation, which has historically provided the benefits of inexpensive Federal development to nonprofit preference entities?

The Bureau's response, under date of January 12, 1984, was:

> Although our proposed amendments relating to the preference clause would only affect the projects in Title I of H.R. 4275, we suspect that a precident [sic] may be established that could affect future power developments.
>
> There is no provision in our proposed amendments that would prevent a private developer from acquiring most or all of the hydropower which would become available under this bill. We would assume that most of the power would be financed by private developers if the amendments we propose were adopted. However, many of the financing entities would sell their share of the power to the Federal power system for distribution under normal Federal procedures.
>
> The advantage of this legislation would be to allow the power projects to be designed and constructed by the same entity that designed and constructed the existing structures which would insure compatibility of the features. Also, all necessary conditions for existing and future operation and maintenance programs would be met and assurance could be given that the original purpose of the structure

> would be protected. This would be possible even when 100 percent of the project was financed by non-Federal interests.
>
> Our primary interest in developing hydropower at existing facilities is to fully develop the available resource in a timely manner with minimal environmental impact and minimum Federal Investment.

In short, from the Bureau's response it is plain:

1. The Bureau does not regard preservation of preference as one of its primary interests in developing hydropower at existing reclamation facilities.

2. The Bureau regards the amendment package as in fact establishing a precedent for future power developments beyond the handful of authorizations covered by Title I.

3. The Bureau concedes (and assumes) that under its proposed amendments, private developers would acquire most, if not all, of the hydropower that would become available under Title I.

The Bureau's prediction that many of the financing entities would sell their share of the power to the Federal power system for distribution under "normal Federal procedures" (presumably meaning under the preference clause at system rates) is sheer speculation. There is no requirement under the proposed amendment that the financing entities sell their power to the PMA's. In fact, the former Commissioner's amendment package would limit the amount of energy available to PMA marketing to that which is left over after energy is delivered to the front-end financers. Obviously, the amendment is not intended to add power to the federal power marketing system.

Further, it is doubtful whether a private developer who financed a hydro development would have any incentive to add the power generated to the federal power system for sale to preference customers. If the developer were a utility, it would retain the power for its own use. If not, it would try to sell the power to the highest bidder.

In addition, even if the financer sold the power to the PMA, it would be more expensive than power produced by the government. The financer would pay a higher interest than the government, and would certainly expect to make a profit on the investment.

In his statement, the Commissioner suggested his proposed amendments were analogous to the Buffalo Bill legislation, Title I, P.L. 97-293, under which the state of Wyoming will finance the project, but, pursuant to the preference clause, the power will be marketed by the Western Area Power Administration as an integral part of the federal power marketing program. The Buffalo Bill Act is entirely different from the Bureau's amendment. Under the proposal advanced by the Bureau the non-Federal entity financing the project would have the option to take the power in return. Thus, the power does not have to go through the PMA.

Precedent

Although the non-Federal financing amendments would apply only to the seven projects authorized in the bill, it is clear, as noted in the response to Representative Cheney, that the Bureau of Reclamation regards them as setting a precedent which would essentially destroy preference in future federal power developments.

What that would mean is that the federal government would not retain control over the public's water resources, and the federal power marketing program would not be preserved. The consequences of this precedent would be catastrophic to consumer owned utilities.

Bureau's "Preference" Proposal

The Bureau's proposal "that preference customers be given priority for selection as the powerplant developer, provided that the proposal by the preference customer meets or exceeds other proposals in conserving and utilizing the water resources in the public interest" does not adequately protect preference. The Bureau itself has admitted that most of the hydro projects would be financed by private developers. This is a recognition that most small consumer owned systems would not have the resources to finance the project.

The language of this proposal is strictly cosmetic since the Bureau knows that few consumer owned systems will be able to finance hydro projects. Preference customers are not all equal in the financial market. Their cost of capital is different. Some, particularly the small, have no established credit rating. Indeed, it may be impossible for some of the smallest preference customers to raise the capital necessary to construct new federal projects. These are the systems preference was designed to assist and promote. In contrast, the Bureau's amendment package would condition "priority" for development on financial ability. Preference has never been so conditioned in the past.

APPA has recognized that preference customers must have the right of first refusal to contribute development funds and take project power in some limited cases. (See pages 6 and 7 of the enclosed statement.) That position was adopted in recognition of the fact that in certain limited circumstances, federal development might not always be possible. In those cases, consumer owned utilities must be granted a right of first refusal. However, our policy, in contrast to that of the Bureau, was to be applied on a case-by-case basis. The Bureau's sweeping amendment package, which would serve as a precedent for all future projects, is not warranted and should be rejected.

Interest Rates

Another proposed amendment offered by the Bureau would increase the interest rate on power facilities constructed by the federal government from the interest rate paid by the Treasury on 15-year or longer outstanding government obligations to a so-called "market yield" interest rate. The effect of this would be to increase the cost of power for the consumers. The substitution of yield for cost-based interest rates has been rejected by Congress in the case of federal reclamation projects time and time again over the past thirty years, a recent example being the interest rate provisions (section 105) of the Buffalo Bill legislation. It should be rejected again.

Congressional Action

The Administration has attempted several times to add these types of amendments to water project legislation. Last year, for example, the Bureau of Reclamation proposed the same amendments to S. 268, the Senate counterpart to H.R. 4275. The Senate Committee on Energy and Natural Resources rejected the amendments, and the bill passed the Senate without them.

A similar attempt was made with respect to S. 1739, an omnibus water resources bill. As reported from the Senate Subcommittee on Water Resources of the Environment and Public Works Committee, the bill would have (a) turned over to non-federal parties future hydroelectric development at Corps of Engineers and Bureau of Reclamation dams and (b) voided traditional preference to consumer owned utilities in the selling of power produced at any new federal facility.

Consumer owned utilities' objections to these provisions of S. 1739 were heard, and the bill was modified when it was considered by the full committee. It is clear from provisions of the committee report (Senate Report No. 98-340 at p. 53), set forth on page 11 of our attached statement, that the majority of Senate Environment Committee members share the concerns of consumer owned utilities that preference be preserved, that the federal government continue to exercise considerable control over the development of hydro power at federal projects, that power from such projects be marketed through the power marketing administrations, and that the rates for such power be based on cost of production.

Conditional Authorization

APPA notes and supports the conditional authorization in the bill for Whiskeytown and Red Bluff powerplants. These projects, while authorized for federal development, are held open for development by the City of Redding, California, until October 1, 1985. Redding, a public power system, has already received a license from the Federal Energy Regulatory Commission for the Whiskeytown unit and holds a preliminary permit for Red Bluff. Since that system has already expended funds to develop these projects, it is only appropriate to allow Redding to proceed with its plans.

Conclusion

In conclusion, APPA, NRECA, CREDA and Mid-West strongly support Title I of H.R. 4275 as introduced. We continue to believe that the federal government has a legitimate role in developing our hydroelectric resources. We urge the rejection of the non-federal financing scheme put forth by the Bureau of Reclamation. It is unfortunate that this legislation as introduced has not been enacted previously -- unfortunate because valuable power potential is flowing downriver each day and the ultimate cost of each project increases with delay. The committee should reject the proposed amendments and report the bill favorably as quickly as possible so that the projects authorized may move forward to construction.

EXHIBIT II

JOINT STATEMENT OF AMERICAN PUBLIC POWER ASSOCIATION, NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION, MID-WEST ELECTRIC CONSUMERS ASSOCIATION, INC., AND COLORADO RIVER ENERGY DISTRIBUTORS ASSOCIATION

February 6, 1984

I. INTRODUCTION

The National Rural Electric Cooperative Association ("NRECA") is a non-profit national service organization for some 1,000 rural electric cooperatives which provide central station electricity to nearly 25 million consumers in 46 states. Rural electric cooperatives distribute roughly 11% of the nation's electricity and serve 10% of their population. As cooperatives owned by the consumers of their electricity, NRECA members seek to provide a reliable source of energy at the lowest possible cost.

The American Public Power Association ("APPA") is a national service organization representing over 1,750 local public power systems located thourghout the United States. Its membership includes municipally-owned electric systems, distinct units of local government such as public power and irrigation districts, and state agencies such as the Public Service Authority of South Carolina. These publicly-owned systems distribute approximately 15% of the nation's electricity to 13.5% of the population.

The Colorado River Energy Distributors Association ("CREDA") is a non-profit membership corporation comprised of preference customers, preference customer organizations and state agencies located in the Colorado River Basin States. CREDA represents preference customers that purchase over ninety percent of the CRSP power and energy that is marketed by WAPA.

The Mid-West Electric Consumers Association, Inc. ("Mid-West"), is a non-profit membership corporation. It is the regional service agency of more than 300 rural electric cooperatives and consumer-owned electric utilities serving more than 3,000,000 customers in the nine states served by the Pick-Sloan Missouri River Basin Program and associated federal power developments. Mid-West's members are substantial purchasers, either directly or indirectly, of federally-generated power marketed by the Western Area Power Administration.

These four organizations have cooperated in the development of this Joint Statement on behalf of all of their preference customer members. Together, we represent over 1,200 consumer-owned electric utilities who are purchasers of federally-generated electric power.

II. FEDERAL WATER AND POWER PROJECTS SHOULD BE FUNDED BY CONGRESSIONAL APPROPRIATION

Traditionally Congress has authorized and appropriated funds to construct multipurpose water resource projects for flood control, navigation, irrigation, hydroelectric power development, municipal water supply, recreation and other public purposes. If projects like Bonneville, Grand Coulee and Shasta could be funded and constructed by the federal government in the perilous times which existed during the great depression of the 30's, it certainly seems feasible for the federal government to continue this practice in the affluent times of the 1980's.

In the early days of this country, rivers formed the principal arteries of transportation. The Congress and the federal government gave the basic job of developing and improving the rivers for navigation to the U.S. Army Corps of Engineers, which has been engaged in this activity since our nation came into existence. It was recognized at that time that the development of these rivers provided public benefits. This fundamental fact remains true today.

In 1902 the Bureau of Reclamation was established as a division of the U.S. Geological Survey. It soon became an independent agency, and has been in the business of building multipurpose dams and constructing power plants and developing irrigation for over 75 years.

In 1946, the government accelerated the development of multipurpose resource projects and began large scale improvements for flood control, navigation and hydroelectric power development on many of the principal rivers of the nation. Out of this came such exemplary developments as the Pick-Sloan Missouri River Basin Project ("Pick-Sloan"), the Central Valley Project in California, the Columbia Basin Project and later the Colorado River Storage Project ("CRSP").

Despite the fact that few new projects have been authorized during the past decade, Congress has continued to fund and the Corps of Engineers and the Bureau of Reclamation have continued to build, many projects. Some notable examples are the Richard B. Russell Dam in Georgia and South Carolina, the additions to the Libby Dam in Montana, the Garrison Irrigation unit of the Pick-Sloan Project in North Dakota, the Frying Pan-Arkansas Project in Colorado, the Auburn Folsom Project in California, the Central Arizona Project in Arizona, the third Power Plant at Grand Coulee Dam and the Bonneville Unit of the CRSP in Utah.

As a part of this effort, the federal government has appropriated funds annually to construct, operate and maintain these and other projects. Last year the Congress appropriated over $2.6 billion to the Corps of Engineers and nearly $1 billion to the Bureau of Reclamation for their water and power development programs.

A parallel effort of the federal government has been the marketing of power from federal hydroelectric developments by the Bureau of Reclamation (now by the Western Area Power Administration), the Bonneville Power Administration established in 1937, and the Southwestern, Southeastern and Alaska Power Administrations ("PMA's") established as needed by the Secretary of the Interior (now a part of the Department of Energy). These agencies are engaged in the sale of power to preference customers and the power is paid for at rates which are established to cover all cost including the amortization and maintenance of the needed power facilities over a period of usually 50 years. Since the preference customers pay rates which cover all costs (including the government's borrowing costs), they have in effect and in fact been 100 percent cost sharers in the recovery of capital expended by the federal government for the cost of multiple-purpose hydroelectric power projects. Indeed, preference customers often pay more than the cost of a project's power features since many laws require them to contribute substantial amounts toward repayment of costs allocated to irrigation features of projects.

III. PRINCIPLES WHICH SHOULD GOVERN ANY RESORT TO NON-FEDERAL FUNDING OF WATER AND POWER PROJECTS

Our members have taken positions in the past on development of water and power resources by the federal government which they would urge be respected in any investigation of non-federal financing alternatives. Additionally, Congress has established several key policies on this subject recently which must be respected.

A. NRECA

NRECA's fundamental position on water resource development is clearly stated in a series of resolutions which were adopted or reaffirmed unanimously at our 42nd Annual Meeting in San Francisco, California on January 22-25, 1984. The two resolutions which most clearly define the long established policy of the NRECA are the following:

> Development and Federal Multiple Purpose Projects
>
> The critical need for energy in our nation today and the near future necessitates the maximum use of the falling waters in our nation, a replenishing resource that requires no further research and development to harness.
>
> We urge the Congress to appropriate the funds necessary to complete the planning, the environmental and feasibility studies, and to authorize and appropriate funds to construct all feasible multi-purpose projects as rapidly as practical, and also install electric generation in all existing non-hydroelectric projects where feasible.
>
> Furthermore, Congress is urged to appropriate funds to enable preauthorization river basin planning including hydroelectric features, so that construction may be undertaken during subsequent years on a logical sequence of multi-purpose river basin development.
>
> Preference in Marketing of Federal Hydro Power
>
> More than 600 rural electric cooperatives purchase low cost wholesale power from federal hydro projects which saves their member consumers some $500 million per year compared with the cost of power from alternative sources.
>
> Since 1906, the Congress has repeatedly decreed by statute that non-profit cooperatives and public bodies, many of which serve small communities and sparsely populated rural areas, be granted preference in the sale of federal power so that (1) they will have a reliable source of power at reasonable cost, (2) the benefits of federal power will flow directly to consumers and (3) federal power will constitute a competitive force in the retail energy market. This preference for public bodies and cooperatives in the sale of federal power has been repeatedly upheld by federal courts of last resort as a lawful exercise of Congressional power.
>
> We support retention of preference for rural electric cooperatives and public bodies in marketing power and energy

> from federal power marketing authorities and oppose legal and administrative efforts which would reduce allocation of existing contractors.
>
> We oppose attempts in the states of Utah and New York and by other non-preference utilities to eliminate long-standing rights in order to obtain allocations of preference power.

In simple terms, what these two resolutions say is that we believe the long established government policy of authorizing and building projects should continue and that the preference to rural electric cooperatives and other public agencies should be continued in marketing power from such projects.

Another resolution, which is of great importance, is NRECA's position on federal power project studies:

> Federal Power Project Studies
>
> The Reagan Administration has by at least three separate efforts attempted to significantly and adversely affect the policies, practices, and rates of the five power marketing agencies, the Tennessee Valley Authority and indirectly the Power Authority of the State of New York.
>
> Two of these efforts were under the direction, or at the suggestion of the Cabinet Council on Natural Resources and the Environment. Congress' reaction was to prohibit the use of any appropriated funds to even study the concept of basing rates for federal hydroelectric power projects on marginal cost pricing rather than the present policy based on cost of service. The so-called Grace Commission nevertheless continued the onslaught.
>
> We oppose any attempt to
>
> — give access to non-federal interests in the building of additions to existing federal projects except where it is in the best interest of the rural electric cooperatives;
>
> — weaken the policies regarding the relicensing of non-federal projects;
>
> — weaken or abolish federal government preference to power marketed by federal power marketing agencies; or
>
> — modify the traditional methods of determining the actual costs of service.
>
> We oppose any changes in federal power marketing practices and policies inconsistent with existing law and urge the Administration to resist any effort to create rates which would not be actual cost based as stipulated by state laws. We also commend the Congress for its opposition to these efforts.

B. APPA

A fundamental element of the federal power program is the preference in purchase of power afforded rural electric cooperatives and local public power systems. Like NRECA, the American Public Power Association has a long and consistent record in support of preference and the federal power program. Some examples of previously adopted resolutions which continue to guide the actions of the Association today:

- In 1953, APPA reaffirmed and restated its belief in the "fundamental soundness of the preference" and called upon the federal government to "encourage arrangements between local agencies which will bring benefits of federal power to all preference customers in the area on an equitable basis."
- Also in 1953, the Association registered its "opposition to the execution by the Department of the Interior of any contract with privately owned electric power companies which . . . does not make power available to preference customers through a mutually agreeable wheeling arrangement, or through some alternate means which preserves to these preference customers the full benefits, both present and future, as to availability and cost to which they are justly and legally entitled."
- In 1961, 1963 and 1964 the Association adopted resolutions opposing "actions, legislative or administrative, which detrimentally affect the traditionally antimonopoly preference clause concerning the marketing of power from projects constructed with federal funds, and opposing any proposal to grant private power companies a statutory reservation of power at federal projects contrary to the traditional preference clause principle."
- In 1970, the Association again reaffirmed its opposition to "actions, legislative or administrative, which detrimentally affect the traditional antimonopoly preference clause . . . and calls on the Bureau of Reclamation and the Department of the Interior to give active support to the preference clause in federal power marketing programs to insure that this statutory protection is fully reflected in the disposal of any power sold by federal power marketing agencies."
- In 1983, the Association once again expressed "its strong and continuing support for the policies underlying the application of the federal preference laws, finds that these policies are as valid in the 1980's as they were when enacted and consistently reenacted over the past 75 years, and will commit its full resources to oppose all efforts to subvert the preference laws."

C. Summary of Consumer-Owned Utility Positions On Non-Federal Financing And Cost Sharing

From the examples cited, it is obvious that NRECA and APPA share a common concern over the future of the federal water project program. The conscious "no new start" policy advocated by opponents of the federal water program combined in recent years with mounting federal deficits and concern over federal expenditures for even the most meritorious public works projects have prompted many to search for non-federal financing alternatives. APPA and NRECA have joined in this search.

Last year, for example, APPA created a task force to examine numerous non-federal financing plans. Most members of the task force and of the Association through the adoption of a resolution recognized that, ". . . due to economic and other circumstances, federal development may not always be possible and thus alternatives may be required in order to meet local and regional water and power needs." However, the task force recommended and the full membership, during APPA's 1983 Annual Conference, adopted, a resolution pledging APPA's continued and vigorous support for federal financing and development of all economically viable hydroelectric projects at both federal dams and at undeveloped and underdeveloped sites. The resolution continued, however, to note that, due primarily to current economic conditions, in some cases alternatives must be found.

One alternative endorsed by both the task force and the APPA membership suggests that, "... when federal development is not possible, consumer-owned, non-profit public power utilities and rural electric cooperatives engaged in providing electric utility service and accepting full utility responsibility must be granted a right of first refusal to contribute development funds." Such systems would then be entitled to power produced in proportion to funds contributed.

The task force and APPA's major policy committee also adopted a second resolution on non-federal development. That resolution endorsed a proposal similar to the one reflected in S. 1521, introduced last year by Senator Don Nickles (R. Ok.). Under that bill, non-federal entities would finance and develop federal water projects. However, the power from such projects would be marketed through the appropriate federal power marketing administrations pursuant to existing law under which preference is provided to local public power systems and rural electric cooperatives.

Proponents of exclusive federal development successfully argued against this resolution during the Association's 1983 business meeting and the resolution was not adopted. The defeat of that resolution demonstrates the strong and continuing commitment of APPA to federal development.

Nevertheless, several members of APPA believe the Association must continue to examine this and other options. For example, the Public Power Council, a regional organization representing the preference customers of the Bonneville Power Administration and a member of both NRECA and APPA, adopted a resolution endorsing the concepts contained in S. 1521. The executive director of that organization has requested APPA's policy committee to re-examine its position on this issue at its next meeting, to be held this Wednesday, February 8, 1984. On the other hand, Mid-West, also a member of both NRECA and APPA, adopted a resolution in December of 1983 vigorously opposing that approach. Members of Mid-West oppose front-end funding proposals like S. 1521 because they perceive them as either attacks on preference or as cost increasing devices.

NRECA has also recently addressed the question of cost sharing. During its 1984 Annual Conference, NRECA adopted a resolution on cooperative installation of generating facilities in federal water impoundments which reads as follows:

> There are many federal water impoundments which are capable of having installed therein, or as a part thereof, hydroelectric generating facilities.
>
> Unless the federal government timely acts to install such facilities and market the output thereof pursuant to the preference laws, NRECA urges its member systems to study the feasibility of installing such facilities, either solely by themselves or in cooperation with other entities, and, where found feasible, to undertake to install such facilities and receive the electric production therefrom and to utilize the same as they find to be most desirable, including, if such be the case, the marketing of such power and energy to or through Federal Power Marketing Agencies (H.-1983).

D. Conclusions

As demonstrated, our organizations have explored numerous non-federal financing alternatives. We are willing to examine alternatives on a case-by-case basis. However, no universally acceptable alternative which could be applied across the board has been endorsed. Likewise, Congress has exhibited a preference for a case-by-case approach to proposals which deviate from the traditional method of planning, constructing and operating federal power projects. The inability to devise a universal alternative is adequate testimony to the difficulty of this task.

The Administration's recent retreat from rigid, fixed, front-end funding by non-federal interests to a case-by-case approach is welcome news. However, we remain chary of the Administration's insistence that some non-federal front-end funding will be required in all or practically all cases. We remain unpersuaded, for reasons which we detail later, that non-federal, front-end funding as applied to power facilities is not at bottom an attack on the preference clause reminiscent of the Eisenhower Administration's so-called "partnership policy" that was resoundingly rejected by Congress in the 1950's. Our concerns are heightened by the Administration's use of the term "partnership" itself which, as any student of the history of federal water project development and federal power marketing knows, became a euphemism, a code-word if you will, for the elimination of preference under the guise of budgetary restraint.

While we do not reject out-of-hand the principle of case-by-case analysis, proponents of any such approach bear a heavy burden of proof to demonstrate that it is not an attempt to dilute preference and effective, system-wide federal power marketing.

As noted previously, the history of the federal power program is one of effective cost-sharing. The purchasers of federal surplus power, primarily preference customers, are paying at a minimum 100 percent of project costs allocated to power and in many cases these purchasers are subsidizing, through power rates, other project purposes.

The problem is not cost-sharing in the form of repayment of the federal investment, with interest, after the investment has been made. The problem is devising an "up-front" financing program under which the purposes of the federal water program can be met, and the interests of the preference customers protected, while simultaneously relieving the federal government of any obligation to contribute funds during the construction period. In evaluating any "up-front" non-federal financing schemes, our organization have measured various proposals according to the following criteria:

1. Will the preference rights of local public power systems and rural electric cooperatives be fully protected?
2. Will the federal government retain control over project selection, development and operation?
3. Will the power produced be marketed through the federal power marketing administrations?
4. Will power be developed and marketed at the lowest possible cost?

Of paramount concern to us is the preservation of preference rights of local public power and rural electric cooperative systems. Preference is regarded as the "birthright" of the consumer-owned utility movement in this country. When that birthright is challenged, or even when it is perceived to be under challenge, consumer-owned utilities have consistently united and prevailed. For this reason, we suggest that the Bureau exercise considerable caution in examining alternatives to the federal water and power program.

As noted earlier, most consumer-owned utilities still recall the now discredited water power "partnership" advanced during the Eisenhower years. That partnership was appropriately described as providing that the federal partner own the store (the public water resource) while the private partner, investor-owned utilities, would own the cash register (the power production facilities). Little will be gained if proposals are surfaced which draw the strong and immediate opposition of consumer-owned utilities.

There are new devices today which pay lip service to preference while in fact, avoiding Congressional intent. For example, proposals have surfaced in Oregon, Utah and New York under which "public agencies" would be established which would do no more than receive preference power and turn it over to investor-owned utilities for distribution.

For this reason, we are concerned over the references to preference agencies in the Bureau's paper prepared for this seminar. There is a recognition that preference must be given to "public organizations" and "governmental bodies." However, not every "public organization" or "governmental body" is a preference entity under the various federal statutes. In our view, Congress intended this preference to extend to public bodies which accept full utility responsibility for the customers within their service area.

We hope the Bureau is sensitive to these problems and that this meeting today is a start down that road.

It is also important to consumer-owned utilities that the federal government retain control over the public's water resources. Federal involvement has ensured that this resource was developed in a cohesive and comprehensive manner in order to capture the maximum possible benefits for the public. Private control would ultimately lead to development designed to maximize vendible outputs, and thus, obviously, profits, with little or no consideration for the multiplicity of other public uses. The small, rural communities served by many consumer-owned utilities depend on the comprehensive development of this public resource. These consumer-owned utilities are not driven by a need to maximize profits. Instead, they reflect and support the needs of their consumer owners. Thus, it is essential, in our view, that this multiplicity of uses not be ignored.

It is also essential, in our view, that the federal power marketing program be preserved. In fact, because of the obvious impact of front-end funding on federal power rates and marketing, we believe that such proposals in the case of power facilities fall more appropriately within the domain of the federal power marketing agencies. This is also the view of the Senate Committee on Environment and Public Works, as shown by its report on S. 1739, S. Rep. 98-340 at pg. 53. On another occasion, in testifying on H.R. 4275 before the House Committee on Interior and Insular Affairs last November 17, the Western Area Power Administrator expressed the concern of the Department of Energy that "the authorities of federal power marketing agencies not be undermined or affected in any way by non-federal participation in powerplant development."

We agree and urge the Bureau to recognize the PMA's primary role in pursuing any non-federal financing alternatives involving power. This is because the PMA's already have authority over marketing federal power and in setting power rates — two critical elements in any successful financing arrangement whether it be federal or non-federal. There are also practical utility reasons for this primary role for the PMA's. The PMA's integrate the various load shapes of the projects to maximize the resources developed. Their central utility role also avoids duplication of efforts by others.

For the most part, existing power marketing administrations must market power developed at new federal sites. This is important both because these administrations market power pursuant to preference laws and because, since they have an existing resource base, they can meld the cost of power from new projects with the cost of power from older projects. Such melding of rates can make feasible new power projects which might otherwise be marginal.

Finally, consumer-owned utilities have always supported cost-based rates. Any non-federal development or financing program must, in our view, be consistent with this pricing philosophy. What is involved here is the marketing of a publicly-owned resource. It is totally inappropriate that this resource be sold to the highest bidder. Federal development had succeeded in divorcing the profit motive from the development and sale of the power potential of this public resource.

E. Recent Congressional Policies

Our organizations' views are shared by many members of Congress. A recent example supports this fact. During the first session of the 98th Congress the Subcommittee on Water Resources of the Senate Committee on Environment and Public Works ordered reported a bill, S. 1739 as introduced, which included provisions on cost-sharing and front-end financing for future federal projects to which we objected. These provisions would have (a) turned over to non-federal parties future hydroelectric development at Corps of Engineer and Bureau of Reclamation dams and (b) voided traditional preference to consumer-owned electric utilities in the disposition of power produced at any new federal facility.

Our objections were heard, and the bill was modified when it was considered by the full Committee. It is clear from provisions of the Committee Report, (Senate Report No. 98-340) set forth below, that the majority of Committee members share the concerns of consumer-owned utilities that preference be preserved, the federal government continue to exercise considerable control over the development of new projects, power be marketed through the power marketing administrations, and rates for power be based on cost of production. The Committee Report discusses these issues as follows:

> This section reaffirms long-established policies governing the marketing of hydroelectric power developed at federal projects. Preference in the marketing of such power is given to public power systems and rural electric cooperatives. The power shall be marketed at uniform, area-wide rates with delivery to purchasers at load centers. Rates are established on a cost basis.
>
> In addition to returning all of the operation, maintenance and replacement costs attributable to the production of power, all of the capital investment allocated to power is recovered, with interest, over a period of 50 years from the time each power feature (including allocated joint costs) becomes commercially operable, or within the useful life of such feature, whichever is the lesser. In addition, there will be amortized, over the repayment period established by or pursuant to law, other project costs assigned in accordance with law for the return from power revenues and reimbursable costs allocated to irrigation under the federal reclamation laws that are beyond the repayment ability of the irrigators.
>
> Preference to consumer-owned electric utilities in the use of the output of federal projects is a concept which dates back three-quarters of a century, and has been reiterated in more than 30 statutes. Excess electric power generated by federal projects is sold to State and local governmental entities and to private, non-profit organizations, when those groups are able

> and willing to purchase the electricity. To the extent that these preferred customers are not willing to purchase the power, it may be sold to investor-owned utilities.
>
> By assuring the availability of power to municipally-owned utilities and non-profit cooperatives, the preference clause bolsters competition.

S. Rep. 98-340 at 53.

IV. PROS AND CONS OF NON-FEDERAL FINANCING ALTERNATIVES

A. Description of Alternatives

With these comments as background, we would now like to turn to the issue which draws us together today, that is, a discussion of various non-federal financing alternatives. While there are an almost unlimited number of variations on this theme, in general such alternatives may be divided into two categories. First, there are alternatives which depend on users of federal water and power projects to contribute part or all of the capital necessary to construct the projects. For ease of reference, we will refer to these alternatives as "user group" front-end financing alternatives. These include user groups 1) directly contributing to the federal government and 2) contributing property in lieu of funds. In each case, project output would be made available to the contributor on some preferred basis in return for the contribution.

Second, there are alternatives which depend on third parties to supply part or all of the capital to construct projects with no expectation that they will receive a right to project output. We will refer to these as "neutral" financing alternatives. Neutral sources of financing include banks and other financial institutions as well as ad hoc groups of investors. Instead of project output, neutral financial sources are interested only in a return on their investment. They would probably look to the need of user groups for project output to secure their investment.

User group financing has been resorted to in several instances in the past. The Metropolitan Water District's involvement in the construction of the Parker Dam in the 1930's is a good example. We understand that user groups are being considered as a source of financing for the upgrading of generating units at Hoover Dam. A variation of this theme occurred at the Buffalo Bill Dam where the State of Wyoming agreed to contribute substantial funds to rehabilitate the project. Project output, however, will be marketed by the Western Area Power Administration at system rates to preference customers in Wyoming.

Financing by neutral parties has not yet come to fruition. It is, however, embodied in legislation pending in Congress (See e.g., S. 1521). As previously stated, under S. 1521, the federal government would be authorized to contract with non-federal entities to finance, construct and "own" hydroelectric projects under the Department of the Interior's general direction. Interior would operate the plants whose output would be turned over to the power marketing agencies for distribution in accordance with existing law. Eventually ownership of these plants would revert to Interior. However, before that occurs, investors would be paid back for their investment plus a reasonable return. It is assumed by supporters of this legislation that the anticipated return plus the various tax breaks available to private developers of projects would attract today the kind of capital Congress used to appropriate to construct federal power projects.

B. Pros and Cons of "User Groups" Versus "Neutral" Financing

The pros and cons of user group versus neutral financing alternatives should be measured in light of the four key principles which must continue to guide federal water resource development. As already noted, these principles are:

1. Protection of existing preference laws.
2. Continuation of federal control over development of federal water and power resources.
3. Continuation of federal marketing of the output of federal water and power projects.
4. Continuation of cost-based pricing of federally-developed water and power.

Neutral financing alternatives can more nearly be fashioned to meet these criteria. However, to the extent that neutral financing alternatives depend upon tax breaks, they are subsidized by the federal treasury. Thus, they do not, as is often claimed, relieve the federal government of the impact of the expenditures they represent.

1. Preference Clause Protection

Neutral financing alternatives will better protect preference because project users will all be on an equal footing. No particular project user will have a preferred position because it contributed funds to the project. All users can be offered project output at non-discriminatory rates.

User group financing alternatives, on the other hand, would impose extreme hardships on preference customers and could, while paying lip service to preference, virtually eliminate preference from a practical standpoint for four reasons.

First, it is possible that user group financing might result in a bidding war. The spoils of such a war would go to the party with the deepest pocket. Municipal electric systems and rural electric cooperatives are ill equipped to engage in such a battle. They do not have readily available risk money which would enable them to prepare and submit bids. Moreover, municipal utilities are generally required to conduct their business in public thus, they are at an inherent disadvantage in any sealed bid type situation. Investor owned utilities, as private corporations and with a large customer base, could thus easily drive the consumer-owned utilities out of the market.

Second, resort to user group financing for federal water projects might exclude preference customers from enjoying their benefits simply because of the tremendous size of such projects. Preference customers in a given region may not be large enough to absorb the kind of output associated with large federal power projects. To the extent such user groups are inadequate due to their size, they could lose the opportunity to benefit from federal power for no other reason than their size.

Third, to condition the opportunity to buy federal power on a preference customer's ability to finance is to subordinate the nation's preference laws to the vagaries of individual state and local laws regulating financing by preference customers. In many instances, preference customers do not have the kind of financing authority which would permit them to take advantage of federal power if they had to finance it themselves. For example, some archaic state laws often restrict municipalities to financing projects constructed within their own boundaries. The financing abilities of preference customers are so varied that any conditioning of access to federal power on a preference customer's ability to finance its development would virtually destroy the uniform, non-discriminatory preference laws as we know them today.

Finally, all preference customers are not equal in the money markets. Municipals can borrow money at tax-exempt rates, while cooperatives generally must pay higher rates. If users must contribute their own funds, some preference customers will be more equal than others - a distinct departure from present federal law and policy which treats all preference customers equally, irrespective of their borrowing costs.

We would add one further thought. The case for front-end funding is bottomed on the notion that federal budget deficits are reduced thereby; however, if the federal government does not borrow the investment funds, the "neutral financer" or the "user group" that participates will. (A rare exception is Wyoming's contribution to Buffalo Bill Dam which came from state tax revenues.) Therefore, the money markets will be the source of funds, whether borrowed by the federal government or the "neutral" or "user group" participants.

2. Continuation of Federal Control Over Development of Federal Water and Power Resources

Literally centuries ago, this country decided that federal development of certain interstate resources was the only means by which coordinated, full development for the benefit of all citizens could occur. Today's water and power resources still belong to the entire country and must be planned and developed with the broadest possible interests in mind. Neutral financing sources would have no parochial stake in how water and power resources were developed, as long as they were fully developed.

On the other hand, user group financing alternatives would impose on the planning and development process the private interests of individual user-financiers which could very well differ from national objectives. Since most federal water and power projects to be developed will include multiple purposes, national direction and control over such development must supercede the interest of any particular user group, in spite of the fact that such a group might be providing all or a major portion of the required funding for a project. The potential for built in conflicts arising between national policies and private interests of user groups funding a project argue against resorting to user group financing alternatives.

3. Federal Marketing of Project Output

The continuation of federal marketing of the output of federal power projects is important to ensure not only coordinated operations but to meet statutory requirements of widespread use at the lowest possible rates. Neutral financing sources at least would not care how federal power is marketed as long as the power is ultimately sold. All preference customers currently have the ability to contract with power marketing administrations and could provide that assurance.

It would be somewhat illogical for a user group financing development of a federal power project to rely on the federal government to market power from its project. The user group financier would be inclined to take the power directly, raising the question of impairment of coordination with other resources and widespread distribution of project power at the lowest possible rates. States and various state agencies have proposed plans for financing federal projects under which the power would not be marketed by the power marketing administrations. These proposals have, in general, been strongly and successfully opposed by consumer-owned utilities.

4. Continuation Of Cost-Based Pricing Of Federal Power

Congress has enunciated its desire on three recent occasions to continue cost-based pricing of federal power. This means that the federal government's full investment plus interest is returned to the government over a reasonable period of time; however, the federal government is not permitted to mark up federally-generated power to rates based upon some hypothetical value and reap profits from development of the nation's water resources. Neutral financing sources would not impair continued implementation of cost-based pricing because they would be interested only in a return of their "costs" which, by definition, would include their required return of investment. However, as earlier noted, this simply transferred the borrowing from the federal government to others, in most cases, at greater ultimate costs to the purchasers of power.

Resort to user group financing alternatives could initiate a major departure from cost-based pricing. For example, Utah Power & Light, during the course of its recent bid to obtain an allocation of Colorado River Storage Project power, has already offered to purchase such power at higher rates. Other non-preference customers could be expected to try to bid up the price of power at new federal projects. Additionally, to the extent non-preference customers invested money in a federal project, they would have to show a profit on their investment and their resale of the power produced to meet local regulatory commission requirements. Thus, it is likely that user group financing alternatives would introduce into the development of federal water and power projects a profit incentive heretofore never experienced. It would not be the profit incentive of a neutral investor but rather that of an owner-user who would logically oppose attempts to control the price at which it resold the fruits of its own investment.

V. CONCLUSION

In summary, we remain unpersuaded that the advantages of front-end funding by non-federal interests outweigh its disadvantages. We are not prepared at this time to conclude that this great nation has decided to abandon federally financed water and power development. Any front-end funding proposals must be subject to searching and critical examination because of their obvious built in inconsistancies with preference, federal control over development of federal water and power resources, federal power marketing and cost-based pricing. Even "neutral financing alternatives" are at best a poor substitute for federal appropriations.

STATEMENT OF NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION

Madame Chairman and members of the Committee: My name is Lowell J. Endahl, manager of Energy Research and Development for the National Rural Electric Cooperative Association (NRECA). We appreciate the opportunity to present the NRECA membership views with respect to the U.S. Department of Energy funding and activities relating to Electric Energy Systems, Energy Storage and Small Scale Hydro programs.

NRECA is the national service organization which represents nearly 1000 non-profit, consumer-owner rural electric systems which deliver electric power to approximately 25 million people in the rural and sparsely populated agricultural areas of 46 states. These relatively small cooperatively-owned electric utilities are located in about 2,600 of the nation's 3,100 counties, and they own and operate about 44% of the miles of distribution line in the United States to serve less than 10% of the nation's population. They own only about 3% of the nation's generating capacity, and they distribute about 11% of the nation's electricity.

The research under consideration today relating to electric energy systems, energy storage and small scale-hydro is of particular interest and importance to rural electric systems. Research in these areas can have a significant economic value through their potential for improved efficiencies, and several of the programs under consideration also have national security implications. We are concerned that, because these aspects of research have low visibility, they are often undervalued--and consequently underfunded.

At the recent NRECA annual meeting (January 23-25) in San Francisco, attended by nearly 9,000 people (mostly directors and managers of rural electric systems), the NRECA membership adopted a series of resolutions on energy issues of concern (resolutions attached).

One resolution in particular, "Research for Growth and National Security" called for "a well-funded, long range commitment for Electric Energy Systems (EES) research and development, within the Department of Energy, and urged minimum funding of $20-million for this work in the FY 1985 budget. The resolution points out that "These areas (electric energy systems research and fuel cell development) have national security implications as well as the potential for providing opportunities for growth and energy self sufficiency." The resolution points out that EES is involved with several programs of critical national importance. Among them is the study of the effects of Electro Magnetic Pulse (EMP) which, in the event of strategic military weapon explosions in the atmosphere, could distrupt communications and immobilize the entire electric generation and delivery system in this nation. We support the increased level of funding proposed by the Administration for this Reliability R&D work.

The resolution also cited examples of other EES projects which require strong support including technologies for improving efficiencies and reliability of power generation, transmission and energy storage, and the electric field effects of high voltage transmission lines. The funding proposed for electric field effects appears appropriate, although a very strong Federal presence in this work is essential for objectivity and public acceptance of research results.

Rural electric systems also support greater research efforts in superconducting technology application systems; control and analysis; and advanced electric energy (battery) storage. It is in these areas of Systems Technology that the proposed FY '85 budget appears to be weakest. We note that plans are to phase out the work on the 10 MVA superconducting generator research program. It is this kind of research that holds promise for substantially improved generating efficiency, and better conversion of our nation's resources to useable energy that should be continued as a responsiblity of the Federal government.

Another program, that we believe is prematurely scheduled for termination, is the support for the Battery Energy Storage Test (BEST) facility. The thrust for advanced batteries for load leveling is just beginning to pay off. With the interest that has been generated among manufacturers and utilities, and with support from the Electric Power Reserarch Institute, the government could easily leverage its investment and help to bring into being a new technology that would have great benefit for the public. At least one rural electric cooperative is keenly interested in purchasing a load leveling battery system to use in its load management scheme. But the research and engineering is not complete and there is not yet a product available to meet the utility's needs. We believe that it is a serious mistake to discontinue this promising research work at this time. Not only does it have potential value for utilities, but it can help provide the stimulous to battery development for electric vehicles. We urge that support for the BEST facility be reinstated at a level of about $1.3 million.

Considering the importance of battery technology, I would like to cite an example of how the Federal government has been responsible for stimulating new development. I am pleased to report to the committee that the NRECA research program is funding the development of an electric farm chore tractor in cooperation with South Dakota State University, The idea for the tractor was a direct result of a study initated by the Department of Energy on the potential for electric vehicles in agriculture. That study showed that farmers typically use tractors for chores around the farmstead less that two hours a day. This use offers an excellent opportunity to exploit the features of electric vehicles on the farm where the usual requirements for speed, range and weight are not problems. From the response we have received from farmers, we believe that there is a market for an electric chore tractor. We will use state-of-the-art lead acid batteries, but the potential for the tractor could be greatly enhanced by an advanced battery, and the BEST facility could play an important role in such a development.

Rural electric systems, which are among the largest potential users of small-scale hydro technology, also support continued research efforts in this area. The Department of Energy has nineteen small hydro demonstrations with facilites completed or underway, which must be monitored and progress reported. Results of these projects will enhance the development, licensing and management of numerous other small hydro projects throughout the nation. We note that the proposed FY 85 budget for small hydro is only $500,000 for demonstration monitoring, technology transfer and research and development. This is a reduction of $200,000 from the 1984 funding level. If we are to make good use of the small hydro potential of this nation, DOE should be investing four times that amount in this important program--at least match that of the Electric Power Research Institute. One of the important needs in the small hydro program is a national testing laboratory where hydro turbines can be tested for performance characteristics and where experimental work can be done. We respectfully request that $1 million be set aside for such a testing and experimental laboratory.

Finally I would like to reemphasize a point that was made at the hearings last year, and which was included in one of our membership resolutions. That resolution, which was reconfirmed at this year's annual meeting, expresses concern over the trend toward shifting the responsibility for major research (including costly, high-risk, short and long range projects) to the private sector. There appears to be a prevalent, but mistaken view that industry is in a position to carry forth and complete the research and development efforts that government abandons. EPRI, which rural electric systems support, has shown excellent cooperation in accepting as much of the burden as possible, but great demands have been put on the entire electric utility industry, and severe capital limitations prevent them from carrying out expanded research programs. Yet the needs are obvious.

The electric utilities are constantly called upon to spend huge sums of money to improve the environment, to increase reliability, and at the same time keep the cost of electricity as low as possible. They are trying. But they, and the public, need government support for research efforts that can help them to improve efficiencies and productivity in an environmentally acceptable way.

The programs that we have discussed today are relatively small, but they are important, and many of them have suffered drastic cuts in the past several years. In the Electric Energy Systems group, I understand that there are only four or five professional people remaining of a technical staff of 25 to 30 four years ago. We urge you to give this dedicated staff the support it needs in terms of funding and additional help to carry on a meaningful and productive program.

In summary, we would like to see funding increased for the Electric Energy Systems to at least $20 million, with the Battery Energy Storage Test (BEST) facility reinstated (about $1.3 million) and additional funding for the superconducting generator, for automation processing concepts, and for EES staffing.

We also urge increased funding to about $2 million for the small-scale hydro program.

We thank you for the opportunity to express these views.

RESOLUTIONS
Adopted or Reconfirmed
at the
NRECA Annual Meeting of Members
San Francisco, CA., January 25, 1984

RESEARCH FOR GROWTH AND NATIONAL SECURITY

We support a well-funded, long-range commitment for Electric Energy Systems (EES) research and development and fuel cell development. These areas have national security implications as well as the potential for providing opportunities for growth and energy self-sufficiency.

We therefore urge the Administration and Congress to provide the following:

> Minimum funding of $20-million for FY 85 for Electric Energy Systems research within the Department of Energy. EES is involved with several programs of critical national importance. Among them is the study of the effects of electromagnetic pulse (EMP) which, in the event of a strategic military weapon explosion in the atmosphere, could result in a pulse from gamma rays that could create a surge 10 to 100 times faster that a lightning stroke. Such a pulse could disrupt communications and immobilize the entire electric industry. Other EES projects which require strong support include system technologies involving improving efficiencies and reliability of power generation, transmission and energy storage, and the electric field effects of high voltage transmission lines.
>
> A five year commitment, with a minimum of $40-million for FY 85, for fuel cell research and development. The potential offered by fuel cell technology for high efficient, dispersed electric power generation (so essential to national security) is enormous. Along with the potential economic advantages, the fuel cell has other very desirable characteristics (environmentally benign, short lead time for installation, modular design, and favorable load-following capabilities) which makes it truly a "tool for growth."

PRIORITIES FOR FEDERAL ENERGY RELATED RESEARCH

To meet America's future energy needs, we must develop every practicable energy source that shows promise of becoming feasible and environmentally acceptable through technological research and development.

Among projects that need adequate funding are: electric field effects; basic transmission and distribution systems research; superconducting technology application; systems control an analysis; and advanced electric energy (battery) storage.

Other technologies which show potential for commercialization and which deserve continued or increased funding and support by the federal government include the following:

- Fuel cell research and development;
- Gas Cooled and fast-breader reactors;
- Geothermal
- Peat, lignite and coal technologies (including gasification, liquefaction, fluidized bed combustion and MHD);
- Energy management and storage technologies (including compressed air, underground pumped hydro and battery storage);
- Solar energy systems (including residential heating and cooling, solar thermal, and photovoltaic generation of power); and
- More efficient small-and medium-scale power generation systems which can utilize coal and/or waste products and which can be used in a cogeneration mode.

We urge that in development and demonstration of each of these technologies special recognition and attention be given to their impact on, and compatibility with, electric utility systems. We further urge the federal government to coordinate these research efforts with EPRI.

EXTRA HIGH VOLTAGE TRANSMISSION LINE RESEARCH

The increased use of extra high voltage (EHV) overhead transmission lines for transmitting electric power by rural electric cooperatives is essential if we are to continue to provide electric power needs of rural America. Recent experiences in acquiring right of way and constructing such EHV lines have revealed serious misconceptions, mystique and fearfulness on the part of the general public as to the electric field effects on vegetation, animals and even people living in close proximity to such EHV lines.

Although such concerns are not supported by scientific evidence, we have an urgent need to provide positive, scientifically demonstrated evidence that there are no significantly adverse effects upon vegetation, animals and people living in close proximity to such EHV lines. NRECA urges the Congress and the appropriate federal agency to adequately fund electric fields research work involving both alternating and direct current overhead EHV lines and disseminate such information to the public.

ENERGY EFFICIENCY TECHNOLOGY

Conservation, by efficient production and use of energy, will play an important role in the present and future national energy strategy. Rural electric systems pledge their continued efforts to assist their member consumers in the wise and efficient use of electric power.

To maximize the potential for efficiency in electric energy production and use, however, considerably more effort on research, development and demonstration of new energy-efficient technology is urgently needed. This includes expanded research on load management techniques and equipment, and on the technology, economics and impact of integrating new sources of energy into existing utility networks.

In addition, work to further improve efficiencies in electric power distribution is needed. Distribution losses alone result in significant loss of peak load capacity of annual energy production. The annual value of such losses for the industry could be appreciably reduced with improvements in transformer loss characteristics, power and load factors, and other design and operating parameters.

We believe that further research can make such improvements economically feasible and we strongly urge the Administration and Congress to fully support an expanded long range program of transmission and distribution loss reduction research; and on such other technologies that might beneficially impact on the electric distribution system.

Mr. BERGLAND. This is my first day on the board as the general manager of the National Rural Electric Cooperative Association. I have with me the two senior policy experts in the field of energy and environmental policy, Mr. Bradcock and Morgan Dubrow. We are here up in support of the 1985 budget request of the Corps of Engineers, Bureau of Reclamation, and the Department of Energy's Power Marketing Agency and other DOE energy programs.

Our support of the cost-sharing proposals set out in the Bureau and Corps programs is conditioned on the criteria enunciated by the NRECA, the American Public Power Association, Colorado River Energy Distributor Association, and the Midwest Consumers Electric Consumers Association and the attached statement submitted to the Water and Power Committee of the Interior and Insular Affairs Committee on March 5, 1984.

We also support the DOE's nuclear program for safety and breeder reacter systems, nuclear waste disposal, completing the fuel cycle, and high temperature gas reactors.

Mr. Chairman, we have listed in the testimony specific items in the budgets in which our Association of Rural Electric Cooperatives have a special interest. I will not read them. They are there for you and your colleagues to examine as you get into the critical process of establishing the priorities in the 1985 budget.

I would briefly like to mention at the bottom of page 2 of my statement the criteria which we believe are important as the matter of entering into joint financial ventures with State and local entities as proposed by the administration has taken in consideration. The four criteria are long standing with us but are very important principles we think:

One must retain the preference rights of local public power systems and rural electric cooperatives and these rights be fully protected. Two, the Federal Government retain control in the project selection and development in operation. Three, the power produced be marketed through the Federal Power Marketing Administration. And lastly, the power we develop be marketed at the lowest possible cost.

Mr. Chairman, in conclusion, I would like to call your attention to what we think is a new and interesting and exciting development in the field of nuclear power. The industry is now operating with 70 nuclear plants in the United States, efficiently and quietly producing electric energy for us. There are 40 additional plants under construction. These plants under construction are in many cases in trouble. These plants generally are very large and the cost is exceeding anything expected in the budgeting. There is a new development that is taking place in the industry that we would like to call to your attention.

These developments are included in the budget submitted by the Department of Energy under the general heading of high temperature gas-cooled reactors. This is a new thing and we believe has great possibilities in providing nuclear energy for the next century and beyond. We request the committee provide $52 million; this is an increase over the budget, $16 million, for the modular and integrated high temperature gas reactor. Additionally, we recommend $4.5 million for authority and recycle in spent fuel treatment which we understand is necessary to complement the modular and integrated high temperature gas reactor program.

Our association is a member of the gas-cooled reactor associates and its constituencies represents about a third of the installed power resources of the country. Since 1978, the staff supported solely by utility funds has been conducting high temperature gas reactor concept evaluations, project development activities, and support services to the Department of Energy. The appropriations requested will support the study of the need for smaller, less complicated nuclear powerplants. One alternative being studied is a 425-megawatt design. A second alternative being studied is high temperature gas-cooled reactor, modular reactor system of about 100 megawatts that can be constructed as a cluster of modules or sequentially constructed in a much reduced time period. Such modules, if they can be economically developed, would allow a utility system to more closely match its load growth requirements and consequently reduce utility cash flow needs.

Additionally, if these smaller units could be factory manufactured, the opportunity exists for greatly improving quality control and quality assurance. Moreover, the production line manufactured and standardized unit hold great potential for reducing the regulatory requirements.

The intent of this program is to determine if it is feasible to achieve greater safety, provide smaller, more easily licensed units which are economic and competitive with much larger reactors being built today.

It is our judgment that if such a modular system proves practicable and becomes a reality, many electric utility systems when faced with the prospect of building new plants will give serious consideration to the nuclear option, an option I happen to feel is imperative to the energy security and economic vitality of our country, one we simply cannot afford to lose.

Mr. Chairman that concludes our testimony. We would be delighted to stand by for any questions you may have.

Senator MATTINGLY. As you well know, the committee has supported the HTGR. It is going to be difficult for us to add much to the request past that $35 million. I think the administration waited for a couple of years to put anything in and we continued to put the money in and this year they have put money in. We would like some help on the dairy program, though.

Thank you all very much.

Mr. BERGLAND. Thank you, sir.

NEW YORK AND NEW JERSEY NAVIGATION PROJECTS

STATEMENTS OF:

SUSAN FRANK, COMMISSIONER OF PORTS AND TERMINALS, CITY OF NEW YORK

ROBERT STEINER, DEPUTY PORT DIRECTOR

Senator MATTINGLY. Ms. Susan Frank, and Mr. Steiner, New York City commission of ports and terminals.

Ms. FRANK. Good afternoon, Mr. Chairman and distinguished members of the subcommittee, I am Susan Frank, commissioner of the City of New York Department of Ports and Terminals. I am joined by Robert Steiner, deputy director, Department of the Port Authority of the City of New York and New Jersey, representing Mr. Anthony Tozzoli who regrets he could not be here today.

Together we have a responsibility of representing some 34 port, maritime, and civic interests in the Port of New York and New Jersey. Due to time constraints, I will not read our prepared statement which has been submitted for the record.

Briefly summarized, the New York and New Jersey port interests are recommending an additional appropriation totaling $7.7 million to be allocated among three studies, one construction and two maintenance projects. I would like to emphasize to you our need for an additional $2 million for the New York Harbor collection and removal project. The additional $2 million requested will provide $500,000 for the start of cleanup work in the city of Bayonne, N.J., and $1.5 million for the Brooklyn waterfront. These additional funds will assure full potential of cleanup work in the New York-New Jersey port.

Local communities, cities, and State have required local matching funds for the apportionment requested and are anxious to move forward.

Thank you very much for allowing us to present our recommendations to you. I will be happy to answer any questions you may have concerning our statement.

Senator MATTINGLY. Thank you, your statement will be put in the record in full.

Sir, would you have any comments. Mr. Steiner?

[The statement follows:]

JOINT STATEMENT OF ROBERT STEINER, DEPUTY PORT DIRECTOR, PORT DEPARTMENT, PORT AUTHORITY OF NEW YORK AND NEW JERSEY, AND SUSAN FRANK, COMMISSIONER, CITY OF NEW YORK DEPARTMENT OF PORTS AND TERMINALS

Representing Also:

Maritime & Port Organizations

Board of Commissioners of Pilots of the State of New Jersey
International Longshoremen's Association
Local 333, United Marine Division-ILA, AFL-CIO
Maritime Association of the Port of New York
Maritime Port Council of Greater New York and Vicinity
New Jersey Maritime Advisory Council
New York City Port Council
New York-New Jersey Port Promotion Association
New York Shipping Association
New York Towboat and Harbor Carriers Association
Save Our Port Coalition
United New Jersey Sandy Hook Pilots Benevolent Association
United New York Sandy Hook Pilots Benevolent Association

Civic Organizations

Bayonne Chamber of Commerce (NJ)
Brooklyn Chamber of Commerce
Chamber of Commerce of the Borough of Queens
City of Newark (NJ)
Commerce and Industry Association of New Jersey
Department of Environmental Protection, State of New Jersey
Department of Commerce and Economic Development, State of New Jersey
Downtown Brooklyn Development Association
Greater Newark Chamber of Commerce (NJ)
Hudson County Chamber of Commerce and Industry (NJ)
New Jersey Alliance for Action
New Jersey Citizens Transportation Council
New Jersey Industrial Development Association
New Jersey State Chamber of Commerce
New York Board of Trade
New York Chamber of Commerce and Industry
Northeast Development Coalition
Staten Island Chamber of Commerce
Union County Chamber of Commerce (NJ)
Union County Planning Board (NJ)
West Side Association of Commerce in the City of New York, Inc.

I am Anthony J. Tozzoli, Director, Port Department of The Port Authority of New York and New Jersey. I am joined by Commissioner Susan Frank of the City of New York Department of Ports and Terminals. Together we share the responsibility of also representing the 34 port, maritime, and civic interests listed on the cover of this statement in urging that Federal funds be appropriated in Fiscal Year 1985 for essential navigation projects in the Port of New York and New Jersey under the Civil Works program of the U.S. Army Corps of Engineers. We appreciate the opportunity to present our views and recommendations on these matters to the distinguished members of this Subcommittee.

The President's Budget to Congress for the Corps Civil Works program for Fiscal Year 1985 presumes the enactment of legislation and thus the collection of fees from users of deep-draft ports to reduce or offset by $216,000,000 the total appropriation request. We object to this assumption. The legislative record to date suggests it's wiser not to count on the passage of cost-recovery legislation.

We are very mindful of the nation's fiscal condition that faces the Federal Government. However, during this period of policy uncertainty, anticipation of cost recovery tends to complicate the Civil Works program appropriations process.

The adequate funding of new dredging and maintenance of existing navigation channels must not hinge on awaiting legislation which may or may not happen. For the port industry to continue to provide national economic benefits, its needs must be met.

Given these conflicting economic, political, and commercial demands, the recommended funding level which Commissioner Frank and I will hereinafter present to you constitutes the basic minimum which is needed for the Port of New York and New Jersey. We know that you will give these recommendations full consideration, as you have in past years, in the context of the many other difficult fiscal decisions that face you in how to best serve the national interest.

Summary of Recommendations

Port of New York and New Jersey interests recommend an additional appropriation of $7,700,000 in Federal funds in Fiscal Year 1985 allocated among six Federal navigation projects. The Federal Budget allotment for these projects is $9,798,000. Hereinafter is a project-by-project comparative breakdown for both sums.

Project	Funding Recommendation Federal Budget	 Local Interests
Study Category		
New York Harbor and Adjacent Channels, NY & NJ	$ 870,000	$2,870,000
Kill van Kull and Newark Bay Channels, NY & NJ	None	$1,500,000
Gowanus Creek Channel, Brooklyn, NY	None	200,000

	Funding Recommendation Federal Budget	 Local Interests
Construction Category		
New York Harbor Collection and Removal of Drift Project, NY & NJ (Waterfront Cleanup)	$4,500,000	$6,500,000
Maintenance Category		
Buttermilk Channel, NY	$1,093,000	$2,093,000
Bay Ridge and Red Hook Channels, NY	$3,335,000	$4,335,000

The remainder of our statement will elaborate on the listed projects.

New York Harbor and Adjacent Channels, NY & NJ

The New York Harbor and Adjacent Channels study is the result of the Corps of Engineers combining the New York Harbor Claremont Terminal Study, authorized by a House Committee on Public Works resolution adopted July 10, 1968, and the New York Harbor Ambrose Anchorage Channels Study, authorized by a December 5, 1980, resolution of the Senate Committee on Environment and Public Works. The purpose of this study is to determine the feasibility of modifying, including enlargement and deepening, of the existing 45-foot deep Federal Ambrose and Anchorage Channels, and the privately maintained 24-foot deep Claremont and 35-foot Port Jersey Channels for commercial deep-draft navigation. The Ambrose and Anchorage Channels function as the main access channel to the Port of New York and New Jersey. The study will include consideration of providing 60 feet or more of depth within the Ambrose and Anchorage Channels, and the construction of an access channel to Port Jersey for construction of a coal terminal.

In November 1983, the Port Authority submitted an application to the Corps for a Department of the Army Permit seeking permission to construct a modern coal transshipment facility at Port Jersey. The construction activities for the proposed facility include the dredging of the Port Jersey Channel from the Federal Anchorage Channel to dockside to a depth of 45 feet.

If this coal facility were in operation today, however, it would be one of only two East Coast ports to have a channel depth as deep as 45 feet. In comparison, many ports in Europe and in the Pacific Rim have water depths much beyond 45 feet. Some are below 65 feet. Thus, the Port of New York/New Jersey, unlike these other worldwide ports, cannot benefit from the economies of scale which can be attained through the use of deep-draft vessels. Foreign buyers have repeatedly expressed a keen interest in deeper channels for the New York/New Jersey Harbor. We, therefore, need early decisions on the Corps' proposed channel deepening study to provide adequate time to firm up coal delivery arrangements with these buyers.

The Fiscal Year 1985 Federal Budget allots only $870,000 for the Corps Stage II detailed environmental, engineering, and economic studies. To complete these studies in a timely manner, we strongly urge that a total of $2,870,000 be provided to assure that the Corps Survey Report and Environmental Impact Statement (EIS) be completed in Fiscal Year 1985.

Kill Van Kull and Newark Bay Channels, NY & NJ

On July 14, 1972, a study of a deepening and selective widening of the Kill Van Kull and Newark Bay Channels was authorized by resolution of the House Committee on Public Works. This Federal waterway serves the general cargo-container terminals at Elizabeth and Port Newark on Newark Bay, as well as oil terminals on the Kill van Kull. The 2,300-acre Port Newark and Elizabeth seaport complex, a $450 million development with an annual payroll in excess of $100 million, handled more than 12.7 million tons of cargo in 1983.

On December 14, 1981, the Chief of Engineers transmitted the Corps of Engineers Review of Reports (Survey) for recommended improvements to Congress for authorization as a construction project. This Survey Report recommends deepening the existing 35-foot channel to 45 feet below mean low water and for the easing of selected channel bends. The Plan of Improvement has an impressive benefit-cost ratio of 7:1 and is the Corps' National Economic Development (NED) Plan and Least Environmental Damaging (EQ) Plan.

No funds are included in the Federal Budget for the project. Port interests are anxious to avoid further delays in this twelve-year-old study. Therefore, we urge that $1,500,000 be provided in Fiscal Year 1985 for continuation of planning and engineering.

New York Harbor Collection and Removal of Drift Project, NY & NJ

The Port Authority provides lead local support for the New York Harbor Collection and Removal of Drift Project since it was authorized as a study in 1963. Since authorization of construction in 1974, the Port Authority has served in the role of Chairman for the New York and New Jersey Waterfront Cleanup Project Coordinating Committee created to implement the project. This Committee consists of representatives from the States of New York and New Jersey; the City of New York; the New Jersey municipalities of Elizabeth, Bayonne, Newark, Hoboken, Jersey City, Weehawken, Edgewater, and North Bergen; and the Corps of Engineers all working together to further the Waterfront Cleanup Project.

The Coordinating Committee, based on the availability of required local matching funds and current project goals, has concluded that the Federally budgeted sum of $4,500,000 will constrain the progress that could be realized. The budgeted sums would provide funds for actual cleanup work in the Stapleton, Jersey City, Hoboken, Weehawken, Edgewater, and Shooters Island waterfronts, in addition to advanced engineering and design work for future cleanup of Manhattan, Bayonne, and Arthur Kill, New Jersey, waterfronts. However, based on project work schedules, resources, and readiness as determined by local interests, actual cleanup work could also commence on the Brooklyn waterfront at a cost of $1,500,000, and the Bayonne waterfront at $500,000.

With adequate Federal funding, local interests are prepared to fund more than $22,000,000 of repair work on waterfront structures and over $12,000,000 of actual removal work. The Committee has estimated that construction work on the various waterfronts will provide more than 600 jobs.

Prior adequate Federal funding has permitted this project to expand initially from Liberty State Park to Manhattan East River, Elizabeth, Hoboken, and Stapleton, Staten Island. We are now ready to start actual cleanup of the Bayonne, Jersey City, Weehawken, Edgewater, Brooklyn, and Shooters Island waterfronts. This will only be possible if Congress does its part in appropriating the required Federal funds.

We, therefore, urge that a total of $6,500,000, or $2,000,000 more than budgeted, be provided to take advantage of local matching funds and local interest readiness for waterfront cleanup. This will assure the full potential of cleanup work and job generation for the Cleanup Project in Fiscal Year 1985. I will now ask Commissioner Frank to elaborate on the balance of our funding recommendations for other Federal navigation projects in the Port.

* * * * *

Thank you, Mr. Tozzoli. I am Susan Frank, Commissioner of Ports and Terminals, City of New York. I wish to add my appreciation for this opportunity to convey to you the joint recommendations of the City of New York, the Port Authority, and local interests for Federal navigation projects in the Port of New York and New Jersey. Before I discuss the other navigation projects in our Region's recommendations, I want wholeheartedly to endorse the funding requests expressed by Mr. Tozzoli, in particular, the $6,500,000 appropriation necessary for the Corps of Engineers to continue progress on the New York Harbor Collection and Removal of Drift Project. I cannot overemphasize how much this region is counting on Congress to respond to our request. The States and City of New York together are prepared to provide enough funds to support construction work on our waterfronts. Considering the financial difficulties of local governments in this region, this ability to support increased Federal funding is a clear indication of the degree of commitment that exists for this project and provides an opportunity that should not be wasted by an inadequacy of Federal funds.

Gowanus Creek Channel, Brooklyn, NY

On October 10, 1974, a critically needed study of the navigation problems and needs in Gowanus Creek Channel, New York, was authorized by House Committee on Public Works resolution. This Federal waterway functions as an approach to extensive commercial warehouses, petroleum, and general cargo terminals.

In March 1982, the U.S. Army Corps of Engineers, Board of Engineers for Rivers and Harbors, reviewed the District and Division Engineers Survey Report which recommended modifying the existing 30-foot Federal navigation channels in Gowanus Creek Channel to 35 feet, except for the reach between 21st Street and Sigourney Street where 32 feet was recommended. The Board recommended modifications that were generally in accordance with the Plan of Improvement identified by the reporting officers. In addition, the Board recommended that a 40-foot depth be provided in lieu of the 35-foot plan. This would provide more efficient movement of deep-draft cargoes, and encourage upgrading of area port-oriented facilities.

The Plan of Improvement would provide benefits to New York City in several ways. First, the increased depths would reduce the necessity to lighten oil tankers in the harbor, thereby reducing the potential for marine accidents and environmentally harmful oil spills. Second, the reduction in lightering to barges at anchorage would result in a reduced cost for the transportation of petroleum products by eliminating delay and extra handlings. A third benefit would be reduced transportation costs for dry cargo in vessels and barges which would take advantage of the greater depths. Furthermore, this plan would help in the revitalization of the Brooklyn waterfront.

No funds are allotted for this project in the Fiscal Year 1985 Budget; we thus urge that an appropriation of $200,000 be made available to the Corps of

Engineers for continuation of planning and engineering so as to avoid another year of delay in this important project.

Buttermilk Channel, NY

Our second concern deals with adequate funding for channel maintenance dredging in Buttermilk Channel, NY. Buttermilk Channel serves as the main waterway to the Red Hook Container Terminal in Brooklyn. The Terminal was dedicated in September 1981, and in 1983 handled more than 700,000 tons of cargo which included 25,000 containers. About 350 employees earn $13 million annually at the facility, with 900 additional workers in port-related industries indirectly receiving employment from the Terminal's operation. The original 42-acre Terminal is being expanded by an additional 34 acres to accommodate the growing demand for use of the facility.

Recent Corps of Engineers condition surveys have determined additional shoaling above the authorized 40-foot deep project depth. This shoaling results in ship delays, increased labor costs, and greater risks of oil spills. We urge a total appropriation of $2,093,000 compared to the $1,093,000 allocated for this project to restore the authorized project depth in this channel.

Bay Ridge and Red Hook Channels, NY

Our last recommendation deals with adequate funding for channel maintenance dredging in the Bay Ridge and Red Hook Channels. These channels provide access to the City of New York's largest container terminal in Brooklyn. The 110-acre South Brooklyn Marine Terminal accommodates some 13 shipping companies handles approximately 800,000 tons of cargo, and employs about 500 people. Channel condition surveys have determined additional shoaling above the authorized project depth of 40 feet. The authorized depth is essential for the continued viability of the Terminal. The project requires $4,335,000 in Federal funds in Fiscal Year 1985 to restore the authorized 40-foot depth. However, the Federal Budget contains only $3,335,000. We, therefore, strongly urge that a total of $4,335,000 be provided.

I want to conclude our joint presentation by assuring you that we have attempted, wherever possible, to keep our appropriation requests as low as possible, taking into consideration the need to reduce Federal expenditures. However, these infrastructure projects are keys to sustaining basic economic development in our region. These projects are an important investment that maintain the efficiency and productivity of both capital and labor, and benefits the commerce of our Port and the nation.

We hope that the Committee will view our recommendations in this light.

Thank you.

STATEMENT OF RAY LEONARD, EXECUTIVE VICE PRESIDENT, WATER RESOURCES CONGRESS

Senator MATTINGLY. Next will be Mr. Ray Leonard with the Water Resources Congress.

Mr. LEONARD. I am not Stephen R. Lindstrom. While I am here in the role of pinch-hitter, I bring you two of our former members of the board, stalwart engineers from the State of Colorado, Mr. Tommy Thompson and Mr. Ival Goslin.

We appreciate very much the opportunity this committee has given us to provide our support to the fiscal year 1985 budget, particularly that of the civil works program of the Corps of Engineers and the Bureau of Reclamation. We in the Water Resources Congress are a nationwide association dedicated to the wise use and constructive management of our water resources. We are different from many trade associations in that we are an umbrella organization. The fabric of our umbrella supports flood control, navigation, irrigation and hydroelectric power, commercial and industrial water supply, recreation, and fish and wildlife conservation.

We have been around a long time ourselves, but through our parent organizations, the Mississippi Valley Association and the National River and Harbor Congress, we have provided support before and during the development of the Mississippi River, the Ohio, Arkansas, Columbia, Colorado, and other river basins. Most recently, we have been active supporters of the Tennessee-Tombigbee project.

Wondrous as all these water projects are and have been, they are not in place forever, as many of you know. Only God builds for eternity. Projects built in the 1930's, 1940's, and 1950's are showing their age. The Corps of Engineers national waterways study reports 118 of the inland waterway systems 225 navigation locks are at least 40 years old. Of this 225 total, 61 are 50 years old or more. But old age creep is not limited to navigation and independent river structures. We have veteran irrigation and flood control projects showing the wear and tear of the years.

Unfortunately, the aging process touches even those projects which have not yet been started. The General Accounting Office reports it takes more than 21 years from the time a survey is authorized until construction begins. Add to the aging factor the 8 long years since the passage of the last omnibus bill and now the situation becomes scary. In addition, many of our Americans are leaving areas of guaranteed water supplies and flocking to the warmer and drier climates where water must travel considerable distances to reach the kitchen faucets. Forgotten is the old addage that water is not always at the right place at the right time.

Then, too, water isn't the only essential ingredient in short supply these days, as you people well know. Money is another scarce commodity. And sad to say, in some circles one is treated as the disease and the other the cure. There are those who would tie the soaring Federal deficits of recent years to water resource development. Then there are those who deny water projects and they forget that water is to the home front what arms are to the national defense.

Water resource development is slowing down except for caretaking and rehabilitation work. A look at the Corps of Engineers' proposed budget for fiscal year 1985 tells the story. Construction funds are dropping while operation and maintenance funds have taken over as the big ticket items for the Corps of Engineers.

Then, too, there is a problem of the last 3 years, a wrangle over cost sharing for project beneficiaries. Water Resources Congress does not dispute a greater role for project users, but the fact remains that the national interest justifies a significant and continued Federal role in water resource development. These projects have always been a part of a three-way joint venture—Federal, State, and local and private investments.

For this reason, the Water Resources Congress supports and strongly endorses the fiscal year budget requests of the Corps of Engineers and the Bureau of Reclamation.

In conclusion, we, the Water Resources Congresss, are firm believers that water resource project authorization and funding is a tried and true process, but we feel there must be a way to provide this important function out of the great debate surrounding charges and cost sharing. Hit lists, user taxes, and cost sharing have held water resource development hostage for too many years. We would like to sidetrack the debate and fast track the development of worthwhile water projects.

Thank you, Senator, for your time.

Senator MATTINGLY. Thank you very much.

I think the key was in the last part when you said, "Let us sidetrack the debate and fast track the development of worthwhile water projects." I guess what Congress has to do is figure out which is worthwhile and which isn't. Thank you very much.

[The statement follows:]

STATEMENT OF STEPHEN R. LINDSTROM, VICE CHAIRMAN, WATER RESOURCES CONGRESS

I am Stephen R. Lindstrom, Vice Chairman of the Water Resources Congress (WRC). We appreciate very much the few minutes you have scheduled for us to provide our testimony on the proposed Fiscal Year 1985 budget being considered by this Subcommittee. As you may know, the WRC is a nationwide association dedicated, since early in this century, to the wise use and constructive management of our water resources. We are an umbrella organization whose ribs support the fabric of flood control, navigation, irrigation, hydro-eelctric power generation, municipal and industrial water supplies, recreation and fish and wildlife conservation.

WRC has been around long enough to have voiced support before and during the development of the Mississippi, Missouri, Ohio, Arkansas, Columbia and other river basins. Most recently, we have been active supporters of the Nation's newest waterway--the Tennessee-Tombigbee project.

Speaking as the voice of experience, we can attest to the big dividends which flow to our Nation's agricultural and industrial economies from the wise investments in dams, reservoirs, navigable channels, levees, inland and coastal port developments, hydro-electric power plants and irrigation projects. We know first hand that these investments, thanks in large measure to this Committee, have their human side too, with improvements in lifestyles of farmers and factory workers, transportation workers from all modes, property owners living behind the levees, and water-seeking recreationists from the office, the campus, the inner and outer cities and the laboratory.

Wondrous as these water projects may be, they are not in place forever. Only God builds for eternity. Projects built in the Thirties, Forties and Fifties are showing their age. The Corps of Engineers' National Waterways Study reports 118 of the inland waterways system's 225 navigation locks are at least 40 years old. Sixty-one of these navigation structures are 50 years old or more. But the old age creep is not limited to our in-river structures. We have many veteran irrigation and flood control projects showing the wear and tear of the years.

Unforunately, the aging process touches even those which have not been started. The General Accounting Office reports that it takes more than 21 years from the time a survey is authorized until construction begins. Add to the aging factor the eight long years since the passage of the last Omnibus Bill and the situation becomes scary. In addition, many

Americans are leaving areas of guaranteed water supplies and flocking to warmer and drier climates where water must travel considerable distances to reach the kitchen faucets. Forgotten is the old adage that water is not always at the right place at the right time.

But water isn't the only essential ingredient in short supply these days. Money is another scarce commodity. Sad to say in some circles one is treated as the disease and the other the cure. There are those who would tie the soaring federal deficits of recent years to water resource development. The budget pruners who would deny water projects forget that water is to the home front what arms are to the national defense.

Cutting, curtailing and postponing much needed water projects have many ramifications. Our transportation, agricultural and industrial economies all suffer when water resource budgets are insufficient. Corporations, cooperatives, private and public utilities, which have committed considerable capital and based long-term management decisions on the promise or availability of a water project are left holding the bag when project development is interrupted. Oftentimes project curtailment can lead to unemployment, reduced trade opportunities, sagging farm prices and bankruptcy.

Water resource development is slowing except for caretaking and rehabilitation work. A look at the Corps of Engineers proposed budget for Fiscal Year 1985 tells the story. Construction funds are dropping while Operation and Maintenance fund requests have taken over as the big ticket item for the Corps of Engineers.

A good deal of the slack created by the slowdown in construction will be taken up within the Corps of Engineers by new efforts in dealing with hazardous waste clean-up and with the coming emphasis on urban water supply system construction and rehabilitation. Hence, our testimony is less concerned about keeping the Corps and the Bureau busy than with a genuine concern for the existing and future condition of our water handling and management structures and systems.

Of course part of the problem is the three year wrangle over cost sharing for project beneficiaries. Water Resources Congress does not dispute a greater role for project users, but the fact remains that the national interest justifies a significant and continued Federal role in water resource development. These projects have always been part of a three way joint venture - Federal, state and local input, and private investments.

For this reason Water Resources Congress supports and strongly endorses the Fiscal Year budget requests of the Corps of Engineers and the Bureau of Reclamation.

Specifically, we must push ahead with Locks and Dam 26 on the Mississippi River. For too long this project has been a barricade instead of a promenade for barges.

The Garrison Diversion Unit in North Dakota is a project of national urgency and urgently needs adequate funding to increase the construction tempo from the slow pace with which it has been proceeding to progress in an orderly manner. WRC urges sufficient funding to accompany long-term solutions to the problems caused by the eruption of Mt. St. Helens out in the Pacific Northwest.

While many critically needed water resource projects are under consideration by this Congress in House and Senate versions of a project authorization bill, I will call to this Committee's attention the urgency of speeding the authorization and appropriation process for seven inland waterway projects including the new Bonneville Lock on the Columbia; the second lock at Lock and Dam 26 on the Mississippi, Gallipolis Locks on the Ohio; Locks 7 and 8 on the Monongahela; Winfield Lock on the Kanawha; and Oliver Lock on the Black Warrior.

Water Resource project authorization and funding is a tried and true process. There must a way to pry this important function out of the great debate surrounding charges and cost sharing. Hit list, user taxes and cost sharing have held water resource development hostage for too many years. Let's sidetrack the debate and fast track the development of worthwhile water projects.

Thank you for your time and attention to our concerns.

SUBCOMMITTEE RECESS

Senator MATTINGLY. We will recess until 10 a.m. tomorrow in this room.

[Whereupon, at 4:08 p.m. Monday, April 2, the hearing was recessed to reconvene at 10 a.m. Tuesday, April 3.]

ENERGY AND WATER DEVELOPMENT APPROPRIATIONS FOR FISCAL YEAR 1985

TUESDAY, APRIL 3, 1984

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:05 a.m. in room SD-192, Dirksen Senate Office Building, Hon. Thad Cochran presiding.

Present: Senators Hatfield, Cochran, Stennis, Johnston, and Huddleston.

NONDEPARTMENTAL WITNESSES

LOWER MISSISSIPPI RIVER VALLEY FLOOD CONTROL PROJECTS

STATEMENT OF HON. THAD COCHRAN, U.S. SENATOR FROM MISSISSIPPI

Senator COCHRAN. The subcommittee will please come to order.

We appreciate very much all of you being here this morning as we begin another day of our hearings in the Subcommittee on Energy and Water Development of the Senate Appropriations Committee.

I appreciate having the opportunity to chair the hearing this morning at the request of Senator Hatfield, who is chairman, not only of this subcommittee, but also of the full Appropriations Committee.

IMPACT OF VALLEY FLOODING

We are dealing with a subject this morning which is obviously very important to a lot of people in the lower Mississippi River Valley. Flooding in the valley remains one of the most serious problems we face. It can cause great losses of property, income, jobs, and personal hardship for many area residents.

As an example, the Corps of Engineers in its recent post-flood report for May and June 1983, describes the impact of flooding in the Vicksburg District. In the Vicksburg District alone, damages from flooding during that period were almost $226 million. Damages in Mississippi totaled about $150 million; in Louisiana, $47 million; in Arkansas, more than $18 million; and over $10 million on the main stem of the Mississippi River.

At the crest of the May-June floods, over 4,168,000 acres were flooded in three States. Almost $186 million in damages were sustained by the farmers of our area.

FUNDING REQUIREMENTS

Funding for the Mississippi River and tributaries project is critical to the effort to reduce these enonnous annual damages. The budget for fiscal year 1985 as submitted to the Congress requests slightly more than $300 million for design, construction, and operation, and maintenance of flood control works in the valley.

This subcommittee has annually recognized the importance of our flood control effort. I am hopeful that we will be able to provide again this year the level of appropriations and the guidance to the Corps of Engineers to insure that the flood control needs in the valley will be met. These critical projects should have the highest possible priority.

The subcommittee appreciates the attendance of all the witnesses, but especially the attendance of the distinguished Senator from Arkansas, David Pryor, who is our good friend and neighbor, and the distinguished Senator from Louisiana, Russell Long, who has just come into the hearing room. I know there are other Senators who will be here as we progress with the hearings. There are many other meetings that are going on as we meet, so most of the Members will be required to be two or three places at once. So we are especially happy that they have taken the time out to come by this hearing.

At this point, I am going to recognize Senator Pryor for whatever statements or comments he might have and to introduce any special witnesses that we have here this morning from his State.

Senator Pryor?

STATEMENT OF HON. DAVID C. PRYOR, U.S. SENATOR FROM ARKANSAS, AND PRESIDENT, LOWER MISSISSIPPI VALLEY FLOOD CONTROL ASSOCIATION

Senator PRYOR. Thank you, Mr. Chairman. In view of the fact that our very distinguished and, I might say, senior colleague, has just walked in, Senator Russell Long of Louisiana, Mr. Chairman, I would like to yield at this time whatever time he may desire.

Senator LONG. You go right on ahead. That is all right. [Laughter.] You are doing a good job.

Senator PRYOR. Mr. Chairman, thank you very much for recognizing me. Today, it is my real pleasure to appear in behalf of the Lower Mississippi River Valley Flood Control Association. I have been honored this year to serve as the president of this great association. And, Mr. Chairman, I am also speaking in behalf of my colleague, Senator Bumpers, from Arkansas, who would like to have the opportunity to submit a written statement for the record. Senator Bumpers is unavoidably detained and is out of the city. He will not be able to be here until after noon today. I would like the opportunity to submit, and I request on his behalf, a statement in the record at the appropriate point.

Senator COCHRAN. Without objection, his statement will be included in the record when received.

Senator PRYOR. It is my pleasure to appear before this subcommittee for the sixth consecutive year in support of efforts of hundreds of our friends in the lower Mississippi Valley, the Ouachita River basin, the Red River basin, and the Arkansas River Valley.

We are fortunate to have the representatives of these groups with us here in Washington this morning, Mr. Chairman. As you know, they travel at their own expense, and their commitment to these projects is, I think, a statement of the importance of the Federal Government's civil works programs.

I hope that the members of this committee will consider each and every recommendation and request that these representatives will make here today on their own merits and lend a very sympathetic ear.

I would like also to discuss with the members of this committee some special concerns that I have this year over and above my continuing support for the programs that are receiving adequate funding.

RED RIVER EMERGENCY BANK PROTECTION

Once again the administration has produced a Federal budget that has serious deficiencies in funding levels for the various ongoing projects in the Red River basin. In particular, one of the most important parts of the work on the Red River to Arkansas is the Red River emergency bank protection project. As it was last year, no funds have been proposed for fiscal year 1985 for work on this project in the State of Arkansas.

Mr. Chairman, this is an area where we think correcting deficiencies in that budget is justified. We simply cannot tolerate the delays this budget proposes.

Accordingly, we recommend a budget for fiscal year 1985 of $12 million for this project in Arkansas and Louisiana, with the following Corps capability figures for the different projects: Emmett realignment (Louisiana), $4 million; Carroll revetment (Louisiana), $1 million; Wilkerson Point realignment (Arkansas), $5 million; Little River revetment (Arkansas), $500,000; and Temple revetment (Arkansas), $1.5 million.

RED RIVER LEVEES AND BANK STABILIZATION BELOW DENISON DAM

Second, Mr. Chairman, the Red River below Denison Dam project has been seriously underfunded in the past, particularly in my home State of Arkansas. I propose the following funding levels consistent with Corps capabilities: Coushatta pile dike extension (Louisiana), $1 million; Honore Bend revetment (Louisiana), $1.5 million; Brown realignment (Arkansas), $3.5 million; Sulphur revetment (Arkansas), $1 million; Horseshoe revetment (Arkansas), $1 million; and Bear alignment, $5 million. Witnesses representing Red River interests in Arkansas and Louisiana will provide more detailed testimony in support of these figures.

RED RIVER BASIN SURVEY AND STUDIES

Additionally, Mr. Chairman, I would like to respectfully ask for consideration of three other smaller amounts for planning and study projects in the Red River basin. These are projects that need to be kept moving as they are projects with substantial local support.

First, the Red River Waterways, Shreveport to Index, Ark., project should have a level of funding for planning for fiscal year 1985 of $520,000.

Second, the phase of this same project addressing planning from Index to Denison Dam should be funded at $350,000.

And last, the Red River below Denison Dam comprehensive basin study should be funded at a level of $335,000.

These are relatively, and I say small numbers, Mr. Chairman, but they represent progress for our people in this State and in our basin.

Mr. Chairman, in conclusion, I would like to touch just briefly on another subject, and I mean very briefly, because I have covered this in a letter to the full committee.

OUACHITA AND BLACK RIVERS, FELSENTHAL NATIONAL WILDLIFE REFUGE

Today, you will hear for the second year in a row from Arkansas State Representative Jodie Mahony of El Dorado on the problems we have faced with changing Corps policy on the Felsenthal National Wildlife Refuge. I wrote to the committee recently because I am very, very serious, as we all are, about this particular issue, because the Corps, under Mr. Gianelli, has decided that its policy on recreation will now be that all recreation projects will be 100 percent local cost funding.

You might imagine, Mr. Chairman, and members of the committee, and Representative Mahoney will tell you, that the commitments made to people in the past who gave up their lands for this project are sacred. I will simply refer you to the letter that I have written. I would ask that that letter be included at this point in the record, asking for specific language in the bill, not in the report, directing the Corps to build this project and appropriating $3.5 million next year, approximately one-third of the total cost.

[The letter follows:]

LETTER FROM SENATOR DAVID PRYOR

February 23, 1983

The Honorable Mark O. Hatfield, Chairman
Subcommittee on Energy and Water Development
U. S. Senate Committee on Appropriations
1218 Dirksen Senate Office Building
Washington, D. C. 20510

Dear Mark:

In February of 1981 the Vicksburg District of the U. S. Army Corps of Engineers published in Design Memorandum No. 53 the Ouachita-Black Rivers Master Plan, which was intended, in its own words, to be a working guideline for all recreational development within the authorized Ouachita-Black Rivers navigation project area. This Master Plan contains the plans, and establishes the commitment of the federal government, to construct at 100% federal cost, eleven access sites and recreational areas within the Felsenthal National Wildlife Refuge. These sites are expected to provide both public access and management access for the refuge's managing agency, the U. S. Fish and Wildlife Service.

The Felsenthal National Wildlife Refuge is a 65,000 acre facility located in the forested coastal plains of south-central Arkansas, and was established in 1975, primarily in response to public concerns about the effects of the construction of locks and dams on the Ouachita River at Felsenthal and Calion. In my opinion, the development of this outdoor recreational facility and wildlife sanctuary was a prime factor in the decisions that allowed the Ouachita-Black Rivers navigation project to move forward.

In September of last year, the Army Corps of Engineers announced that all recreational construction had been suspended indefinitely, and that future recreational development would have to be cost shared 50-50 with local financing. This declaration obviously flies in the face of the Ouachita-Black Rivers Master Plan, and the local people of Arkansas who have supported the project and have had their lands taken for this refuge. The loss of these recreational sites will mean that the refuge can be neither enjoyed or managed properly.

The Vicksburg District Engineer has recognized the obvious faults and problems with this policy as it applies to this project, and has requested an exemption for this work from his superiors. I want to be as helpful as I can to the Committee in developing a feel for this problem, and helping the members to become aware of the inequities. Accordingly, I have asked a group of concerned local citizens to put together testimony for the Committee. I understand that during the last week of March and the first week of April your Subcommittee will be conducting hearings for public witnesses for civil works projects within the Arkansas-Mississippi-Louisiana region. I am requesting that you allow time on your docket for this group during this time, and, if possible, I would request that you place their spokesmen alongside the spokesman for the Ouachita River Valley Association. I believe this will facilitate the purpose of this testimony.

Arkansas State Representative Joseph A. Mahony of El Dorado and Mr. Thomas S. Streetman of Crossett will serve as spokesmen. It is my intention, if it is the will of the Committee, to ask that instructional language be placed in the Committee's report to correct this untenable situation, along with any funding that the Corps may require to complete its mission.

I would appreciate confirmation of a date and time at your earliest convenience, assuming the Committee can accomodate this request.

Sincerely,

David -

David Pryor

INTRODUCTION OF WITNESSES

Senator PRYOR. Mr. Chairman, I do thank you and the other members of this committee for these concerns.

I see the distinguished chairman, Senator Stennis, of Mississippi, our friend and neighbor, has joined us.

If I might, at this point introduce four witnesses who I would like to identify, and then certainly I would yield to my colleague, Senator Long, and any others who might join us. These gentlemen will provide the oral testimony for the group here this morning.

First, as a witness, Mr. T. M. Simmons, chairman of the executive committee. Lower Mississippi Valley Flood Control Association, and president, Yazoo-Mississippi Delta Levee Board. He is from Clarksdale, Miss.

Larry Dowdy, chief engineer, Little River Drainage District, Cape Girardeau, Mo.

Newman Bolls, chief engineer, Mississippi Levee Board, Greenville, Miss.

Arthur Theis, chief engineer, Louisiana Department of Transportation and Development, Office of Public Works, Baton Rouge, La.

Of course, we have Mr. George Grugett, who is with us today, who represents the Lower Mississippi River Valley Flood Control Association. I am sure that he and other members who will be witnesses today will properly and very accurately state the needs of this great association.

Thank you, Mr. Chairman.

Senator COCHRAN. Thank you, Senator Pryor, for your very helpful statement. The counsel and advice that you provide to the committee is very valuable and deeply appreciated. You are a very strong advocate for these important projects, and we appreciate that, too.

Senator Long, we ask you to make any statements or comments or identify any of your friends or constituents who might be here today. Thank you for being here.

STATEMENT OF HON. RUSSELL B. LONG, U.S. SENATOR FROM LOUISIANA

Senator LONG. Thank you so much, Mr. Chairman.

First, let me ask all the people who are here from Louisiana who support this program to stand, please. [Large group standing and applause.]

You can see, Mr. Chairman, we have a lot of support for this program on which you are taking testimony here today, and I want to ask you to give very thoughtful consideration to the presentations that they will make here today.

I would concur in everything that Senator Pryor has said, with a little emphasis on the Louisiana part. I agree with him and I particularly agree about the Louisiana part of it. [Laughter.]

RED RIVER LEVEES AND BANK STABILIZATION BELOW DENISON DAM

Like him, I am concerned that the administration is not recommending funding any construction on the levees and bank stabilization below Denison Dam or, for that matter, any flood control work below Denison. That, in my judgment, could be a disaster if that situation should be continued. It seems to me we shouldn't start on that basis.

Apparently, the theory must be that since there is substantial construction money on the navigation project, particularly the navigation lot below Alexandria, La., that they feel they ought to maybe save by cutting out on flood control work. You and I know that the good Lord doesn't deliver that rain based on what you are doing on navigation. The rain falls because of factors beyond our control. It runs together. You can't tell when that is going to happen.

If we don't maintain our levees and maintain the banks where they are to keep the river inside the banks and between those levees, including levees of sufficient height, any year could be a disaster year.

I don't know of anyone who can say for certain what the good Lord is going to do about all of those matters in advance. We have to deal with them as they come.

The two Senators from Mississippi, who so ably represent that State, very well know that that is a problem, that you can't tell in advance when the rain is going to come.

So, we hope very much that you will support the position of the witnesses, that there ought to be adequate funding for the levees and the bank stabilization along the Red River, as well as these other important projects.

ATCHAFALAYA BASIN, LOUISIANA

We are concerned that there is not adequate provision for the Atchafalaya basin. As I understand it, the flood control project on the Mississippi as a whole is 90 percent complete. But about 50 percent of that flood water will have to go down the Atchafalaya to handle it on the lower end.

That program on the Atchafalaya is only 67 percent complete. We just don't think further delays would be justified in completing what is basically a very good program to protect the lower Mississippi from floods and to handle the waters that go in the gulf.

Furthermore, we hope that the funds will be adequate and that you will provide adequate funds to take care of the lower Mississippi River insofar as navigation is concerned. It is an extremely important navigation project that should not be permitted to deteriorate. We hope you will keep it moving at an efficient pace.

There are other important projects about which these witnesses will be testifying. I hope very much that you will give thoughtful consideration to their presentation and even consistent with our budget needs provide such funds as may be necessary for all of this.

We in Louisiana for many years have looked to Mississippi to help us with our flood control problems because you understand it. You have a parallel problem on the other side of the river. We have received very thoughtful consideration from the Appropriations Committee. Senator Stennis and Senator Cochran have been very helpful to us. We have only one Senator on the greater Appropriations Committee. Mississippi has two. We will make a proposition. If you will take care of Louisiana and Arkansas on the Appropriations Committee, then Senator Pryor and I will look after Mississippi on the Finance Committee when it comes to taxing and raising necessary revenues. [Laughter.]

Senator COCHRAN. That sounds like a very good proposition, particularly this time of year. [Laughter.]

Senator LONG. We thank you very much for your consideration, Mr. Chairman, Senator Stennis.

Senator COCHRAN. I heard about the fellow as he was filing his income tax he got to the point where he was coming up with the final figure that he was going to send in to the Government, and he wrote a little letter to accompany his return. He said, "I have to confess I have had a hard time sleeping all year, that I didn't really send in everything I owed last year. I am enclosing a check for an extra $500. If I still can't sleep, I might send in some more." [Laughter.]

Senator LONG. Thank you very much, Senator Cochran.

[The statement follows:]

STATEMENT OF SENATOR LONG

Mr. Chairman, it is a pleasure for me to appear before your subcommittee today. I wish to commend you for your efforts in this area of critical importance.

I am confident that the expert witnesses testifying here today will provide you with the specific information your subcommittee needs. I know most of the Louisiana witnesses. The subcommittee can be assured of their expertise in these areas. I would, however, like to comment on a few aspects of their testimony.

One subject of the utmost consequence to Louisiana is flood control. The flood control programs currently underway were designed to prevent the recurrence of severe floods which have devastated our State.

As a result, I am particularly concerned that the administration has again chosen not to propose any funding in fiscal year 1985 for an essential flood control project in the Red River Valley. This project—for levees and bank stabilization below Denison Dam—must be funded.

This project is the only total flood control program along the Red River. The entire Red River Valley is at risk if this project is not funded.

Similarly, I am concerned about an inadequate budget request for funding for the Atchafalaya basin project. The basin is a critical element in the success of the overall Mississippi River and tributaries project.

As you are aware, the MR&T project calls for one-half of the waters of a major flood along the Mississippi to be sent through the Atchafalaya basin.

Work on the upstream portions of the Mississippi River project is now more than 90 percent complete. Yet, the levees in the Atchafalaya basin can handle only 67 percent of a major flood. Delays in the Atchafalaya basin compromise the effectiveness of the entire MR&T project. I strongly urge the committee to fund this project in accord with the full capabilities of the Corps of Engineers.

Mr. Chairman, I would also like to take this opportunity to again urge this committee to protect our Nation's investment in navigation projects within Louisiana.

Funds for operation and maintenance of the lower Mississippi River from Baton Rouge to the gulf must be kept at an adequate level. We cannot afford to allow this vital project to deteriorate. We must also continue to take the steps necessary to adapt the channel to modern transportation needs and to make the best possible commercial use of the river.

I would also like to ask this committee to give every consideration to moving ahead as rapidly as possible with the Red River Waterway project. Local interests have already expended millions of dollars in the acquisition of rights-of-way and are fully prepared for additional work. I strongly urge the committee to recommend the funds necessary to keep this project moving efficiently.

Mr. Chairman, I appreciate this opportunity to comment on a few projects of particular concern. There are numerous other projects which will be discussed in greater detail by the witnesses testifying today. I trust that you will carefully consider their testimony, as you have done in the past. I am confident that in so doing you will understand the significant impact these projects have on Louisiana and the Nation.

I want to thank you for this opportunity to appear before your subcommittee.

Lower Mississippi River Valley Flood Control Projects

STATEMENT OF T. M. SIMMONS, CHAIRMAN, EXECUTIVE COMMITTEE, LOWER MISSISSIPPI VALLEY FLOOD CONTROL ASSOCIATION, AND PRESIDENT, YAZOO-MISSISSIPPI DELTA LEVEE BOARD

ACCOMPANIED BY:

LARRY D. DOWDY, CHIEF ENGINEER, LITTLE RIVER DRAINAGE DISTRICT

NEWMAN BOLLS, CHIEF ENGINEER, MISSISSIPPI LEVEE BOARD

ARTHUR THEIS, CHIEF ENGINEER, LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT, OFFICE OF PUBLIC WORKS

Senator **Cochran**. You are a great help to us, and we appreciate your being here.

Senator Stennis, I recognize you for any comments or statements you might have at this time.

Senator **Stennis**. Mr. Chairman, I thank you very much. Of course, I am delighted to be here. I was detained a few minutes which I couldn't avoid. Many things are coming up at the same time for Mississippi, Alabama, and Louisiana and all the rest. So I don't want to take the time of those that are here to testify but thank them for their interest and being here, and we will get on to the dollars now.

Senator **Cochran**. We are happy to have Mark Simmons, Larry Dowdy, Newman Bolls, and Arthur Theis, all who have been introduced by Senator Pryor, here this morning. We invite you to come around and present your statements.

We have written statements from you which we appreciate very much. We will make those a part of the record in their entirety.

HEARING PROCEDURES

Because we do have so many witnesses this morning, we ask you to please summarize your written statements and make such comments from those written statements as you choose so that we will then have an opportunity to maybe have a discussion and some questions about these important projects.

We will call on Mark Simmons first, who is chairman of the executive committee of the Lower Mississippi Valley Flood Control Association. He is also the president of the Yazoo-Mississippi Delta Levee Board at Clarksdale.

Mark, you may proceed.

Mr. SIMMONS. Thank you, Mr. Chairman.

It gives us great pleasure every year to come up here and appear before you, and especially the Mississippi people to appear before our two Senators from Mississippi. I will proceed with my statement.

First, I would like to recognize all the association members that are here to support our request and need in the valley. If they would, I would like for them to stand at this time, all the association members from the valley. [Applause; large group standing.]

Senator COCHRAN. There weren't many people left to clap. [Laughter.]

Mr. SIMMONS. Mr. Chairman, and distinguished members of the committee, my name is Mark Simmons. I am president of the Yazoo-Mississippi Delta Levee District of Clarksdale, Miss. I am also the chairman of the executive committee of the Lower Mississippi Valley Flood Control Association, and I appear here as spokesman for that association to present their views on the funding requirements for the Mississippi River and tributaries project for fiscal year 1985. I will present several items of general interest to all our membership and then call on others of our group to testify concerning specific items. Mr. Chairman, I assure you we will be as brief as possible.

ASSOCIATION MEMBERSHIP

Most of you are aware our association is an agency composed almost entirely of public bodies in parts of Illinois, Kentucky, Missouri, Tennessee, Arkansas, Mississippi, and Louisiana. Our members are public officials who for the most part are elected by the people.

Our association, which is composed of levee boards, drainage district, port commissions, and other organizations engaged in water resources development at the local level, has been serving the people of the lower Mississippi Valley for 56 years. We provide the means for all the people of our great valley to speak and act jointly on all flood control, bank stabilization, navigation, and major drainage problems.

We come before you again this year in support of the Mississippi River and tributaries project which was established by the Flood Control Act of 1928.

NEED FOR WATER RESOURCE AUTHORIZATION LEGISLATION

We realize that authorization of water projects is not the responsibility of this committee. However, we believe it is very important to express to you the deep concern of the members of our association and the citizens of the lower valley about the apparent inability to secure passage of a water resources authorization bill.

We also sincerely believe that any change in cost-sharing criteria on our partially completed Mississippi River and tributaries project would represent a breach of faith with the citizens of the lower valley.

HISTORICAL BENEFITS AND IMPACTS

For over 50 years, while the Mississippi River and tributaries project has been under construction, our people have patiently endured the ravages of floods which could have been prevented by project completion. We do not believe that this project which has always met very economical tests should be changed.

The Mississippi River and tributaries project more than paid for itself in reduced monetary losses in only one flood, but this is not the complete story. The real benefits of this project are the reduction in human suffering, the improved health and well-being of the citizens, and the economic development of the agricultural and industrial potential of large portions of the seven States we represent.

All of the approved methods known to us for making economic and environmental project analyses fall far short of fully evaluating these human needs. Since the productivity of the millions of acres of low-lying lands adjacent to the main stem of the lower Mississippi River are totally dependent upon the integrity of the flood control works, any major slowdown in the completion of this project would represent economic strangulation to this rich and productive portion of our Nation.

We are aware of the ever-increasing demand on the Federal dollar and the many complex problems that the Congress is confronted with, but we believe that this project is economically sound, environmentally necessary, and we urge its completion with all deliberate haste.

FUNDING REQUEST

It has been our considered opinion for the last several years that if we were ever to substantially complete this great project on any reasonable economic basis, annual appropriations on the order or $400 million would be required. We still think that is true and that any amount appreciably less does not represent either an optimum economic program or a reasonable rate of extension of benefits.

Our total request for the Mississippi River and tributaries project for fiscal year 1985 is $369,575,000. The details of this request are outlined on the tabulation which has been furnished the committee. I would like to briefly comment on four of the items in this tabulation.

MISSISSIPPI RIVER LEVEES

Your attention is directed to the main stem levees for which we request an appropriation of $36.6 million for fiscal year 1985. This request is only $4.6 million over the amount in the President's budget and would allow the raising and enlargement of two levees in Louisiana.

The Mississippi River levees are our main line of defense, and assuring the integrity of the entire levee system by necessary raising and strengthening is our highest priority. A levee failure in this valley that drains 41 percent of this country would have a devastating effect on the Nation's economic and social well-being.

CHANNEL IMPROVEMENT

For channel improvements we request an appropriation of $80,400,000 for fiscal year 1985. Our request for extra funds are for additional revetment work and for construction dredging that was not included in the President's budget. This work is vital to navigation and is necessary to protect the main stem levee system from failure due to bank caving and meandering of the river.

ATCHAFALAYA BASIN, LOUISIANA

Another item in our request that deserves special consideration is the Atchafalaya basin in Louisiana. Diversion into this basin during times of flood is necessary to protect vital areas to the south, including Baton Rouge and New Orleans. In major floods, as much as one-half of the Mississippi River flows must be diverted through this basin and the work has not reached a point where the Atchafalaya can safely accommodate these flows. We request an appropriation of $44 million for fiscal year 1985.

STUDIES AND INVESTIGATIONS

We urge that $4,750,000 be appropriated in fiscal year 1985 for general investigations. This is $1,865,000 more than the budget amount and would allow the Corps of Engineers to initiate four studies and accelerate completion of the study of the Boeuf-Tensas basin in Arkansas and Louisiana.

Others in our group will speak briefly on other vital aspects of the Mississippi River and tributaries project, so I will not cover these.

CLOSING REMARKS

In closing, I would like to express to the members of the committee our appreciation for this opportunity to appear before you and for the understanding and consideration that you have given our requests in the past, and I would like to reiterate that it is our sincere belief that the Mississippi River and tributaries project be completed as quickly as possible to avoid the increased costs that are likely to occur due to inflation, to protect the Federal and local funds already invested, and provide for the economic and social well-being of our people. This is of prime importance to the lower Mississippi Valley and to the Nation as a whole.

Mr. Chairman, with your permission, we will proceed with other witnesses. I appreciate very much the committee's kind attention. After the other witnesses have completed their statements, if you have any questions, if I can't answer them, I will direct the question to them. Thank you.

[The statement follows:]

STATEMENT OF THE LOWER MISSISSIPPI VALLEY FLOOD CONTROL ASSOCIATION

FISCAL YEAR 1985 CIVIL WORKS BUDGET

MISSISSIPPI RIVER AND TRIBUTARIES APPROPRIATION

PROJECT AND STATE	FISCAL YEAR 1985 BUDGET	LMVFCA REQUEST FISCAL YEAR 1985
GENERAL INVESTIGATIONS		
Mayfield Creek, KY	155,000	155,000
Bayou DuChien, KY	200,000	200,000
Hickman Harbor, KY	0	270,000
St.Francis River Basin below Wappapello Lake, MO & AR	340,000	340,000
Eastern AR Region Comprehensive Study	575,000	575,000
Yazoo River Basin, MS	530,000	530,000
Southwest Mississippi Tributaries Basin	100,000	100,000
Atchafalaya Basin (Water & Land Resources), LA	500,000	500,000
Boeuf-Tensas Basin, LA & AR	225,000	1,030,000
Lardo Lake-Saline Area, LA	0	240,000
Bushley Bayou, LA	0	300,000
Upper Bayou Teche, LA	0	250,000
Collection and Study of Basic Data	260,000	260,000
SUBTOTAL-GENERAL INVESTIGATIONS	2,885,000	4,750,000
ADVANCED ENGINEERING AND DESIGN		
L'Anguille River Basin, AR	100,000	100,000
Harris Fork Creek, KY & TN	130,000	130,000
Mississippi Delta (Salinity Control Structure), LA	700,000	700,000
SUBTOTAL-ADVANCED ENGINEERING AND DESIGN	930,000	930,000
CONSTRUCTION		
Reelfoot Lake-Lake No. 9, KY & TN	100,000	100,000
St.Francis River Basin, MO & AR	6,300,000	10,210,000
West Tennessee Tributaries, TN	2,400,000	2,900,000
Yazoo Basin, MS:	(16,370,000)	(23,670,000)
Big Sunflower River	1,092,000	1,092,000
Greenwood	375,000	1,375,000
Main Stem	575,000	575,000
Tributaries:		
Except Ascalmore-Tippo & Oppossum Bayous	4,208,000	6,308,000
Ascalmore-Tippo & Oppossum Bayous	3,882,000	3,882,000
Upper Yazoo Projects	3,560,000	6,760,000
Yazoo Backwater	2,678,000	2,678,000
Construction of Yazoo Backwater Pumping Plant	0	1,000,000
Sardis Lake (Dam Safety Assurance)	100,000	100,000
Atchafalaya Basin, LA	23,000,000	44,000,000
Bayou Cocodrie & Tribs., LA	200,000	200,000
Old River, LA	67,300,000	67,300,000
Tensas Basin, AR & LA		
Boeuf & Tensas Rivers, LA	210,000	210,000
Lake Chicot Pumping Plant, AR	3,514,000	3,514,000
Red River Backwater Area	2,885,000	3,885,000
Tensas Cocodrie Pumping Plant	5,491,000	5,491,000
Channel Improvement, IL, KY, MO, AR, TN, MS, & LA	55,000,000	80,400,000
Mississippi River Levees, IL, KY, MO, AR, TN, MS, & LA	32,000,000	36,600,000
SUBTOTAL-CONSTRUCTION	214,870,000	278,580,000
REDUCTION FOR SAVINGS & SLIPPAGE	- 14,864,000	- 14,864,000
SUBTOTAL-CONSTRUCTION	200,006,000	263,716,000
OPERATIONS & MAINTENANCE	100,179,000	100,179,000
GRAND TOTAL-MISSISSIPPI RIVER & TRIBS. PROJECT	$304,000,000	$369,575,000

INDIVIDUALS WHO ATTENDED HEARINGS BEFORE THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS

APRIL 3, 1984

MISSOURI

Consolidated Drainage Dist. #1

Mr. Glenn Ault, Jr.
Mr. Joe Welsh
Mr. Bud Story

Drainage Dist. No. 6 & 8

Judge D. J. Merideth, Jr.

MISSOURI

Levee District #3 of Miss. County

Mr. Hugh Hunter Byrd
Mr. Elliot Rafferty

Little River Drainage District

Mr. Harry Bock
Mr. Riley Bock
Mr. Dale Cato
Mr. Larry Dowdy
Mr. Vic Downing
Mr. Joe Mulcahy
Mr. E. B. Gee
Mr. W. P. Hunter

St. Francis Levee District

Mr. T. A. Haggard
Mr. Billy Jack Davis

St. John's Levee and Drainage Dist.

Mr. A. C. Riley

ILLINOIS

Associate Member

Mr. Wayne Barber
Mr. Leonard Boyer

KENTUCKY

Fulton County Levee Board

Mr. Brantley Amberg
Mr. Bob Sanger
Mr. George Helm
Mrs. Mary Frances Major

TENNESSEE

Obion-Forked Deer River Basin Authority

Mr. Ronnie A. Riley
Mr. Billy Spence
Mr. Richard Swaim

West Tennessee Tributaries

Mr. M. V. Williams

ARKANSAS

Chicot County Drainage District

Mr. Gordon Thurman
Mr. Ted Thornton
Mr. J. M. Buffington

ARKANSAS

Drainage Dist. #7 of Poinsett County

Mr. John A. Brunner, Sr.
Mr. D. F. Portis
Mr. Jimmy Moon
Mr. Jim Roberts
Mr. Wayne Hinds
Mr. Ben Hyneman
Mr. Tommy Goldsby

Drainage Dist. #16 and #17

Mr. John F. Bearden

Grassy Lake and Tyronza Drainage District No. 9

Mr. Steve Wilson

Helena Improvement Dist.

Mr. James C. Frazier

Laconia Drainage and Levee District of Phillips County

Mr. Al Haraway, Jr.
Mr. Gene Raff
Mr. Raymond Galloway
Mr. Larry L. Allen

L'Anguille Improvement Dist. #1

Mr. Richard Imboden
Mr. Forrest M. Wood

White River Drainage District

Mr. Charles Roscopf

St. Frances Levee District

Mr. James O. Campbell
Mr. Sanders Carter
Mr. William Clarke
Mrs. Gloria Eddington
Mr. Burrell Fair
Mr. Bill Felty
Mr. Everett Hood
Mr. D. C. Lowrance
Mr. Thomas McDaniel
Mr. W. Gordon Morris, Jr.
Mr. Paul Owens
Mr. David Rains, Jr.
Mr. J. L. Shaver, Jr.
Mr. W. M. Smith, Jr.
Mr. Ruben Stubblefield
Mr. Earl Wildy

MISSISSIPPI

Greenville Port Commission

Mr. Jack Baskin
Colonel John Brennan
Mr. Alex S. Curtis
Mr. Phield Parish, III

Lead Bayou Drainage District

Mr. Rogers Hall

Mississippi Levee Board

Mr. Murry Alexander
Mr. E. M. Barry
Mr. Newman Bolls
Mr. Rives Carter
Mr. W. Deloach Cope
Mr. John Darnell
Mr. J. Drue Lundy
Mr. F. H. Nance
Mr. C. S. Tindall, III

Yazoo-Miss Delta Levee Board

Mr. T. M. Simmons
Mr. J. W. McClintock, III
Mr. Robert Coker
Mr. N. Craig Brewer, III
Mr. Joe Mooney
Mr. Robert Sayle
Mrs. Nina M. Cook

LOUISIANA

Atchafalaya Basin Levee District

Mr. Wallace Hargrave
Mr. Robert Wilkinson
Mr. Fred Smith

Bossier Levee District

Mr. Syd Burt
Mr. R. C. Atkins
Mr. Dewey E. Burchett, Jr.
Mr. Coy Cooper
Mr. J. Alford DeGueurce
Mr. Bruce Easterly

Caddo Levee District

Mr. Don Duggan

Jefferson Levee District

Mr. William Middleton

Louisiana Department of Public Works

Mr. Arthur Theis
Mr. H. David Smith
Mr. Coan Bueche
Mr. Richard Bennett
Mr. James E. Bagley

New Orleans Port Commission

Mr. Herbert R. Haar, Jr.
Mr. Danny Meyers
Mr. Sam Giallanza

Orleans Levee Board

Captain William Slatten
Mr. Emile Schneider

Pontchartrain Levee Board

Mr. Larry Moch
Mr. Joe Gautreau
Mr. Jesse Bartley
Mr. E. J. Veron

Red River Waterway Commission

Mr. L. D. Myles
Mr. Darrell Williamson
Mr. Richard Gibson
Mr. Glen Jones
Mr. Norman Budd
Mr. Ben Littlepage
Mr. Don Sonnier
Mr. Chester Wells
Mr. Henry Marsland
Mr. Leonard Simek
Mr. Richard Daigre

Tensas Basin Levee District

Mr. Merlin Pistorious
Mr. John Stringer
Mr. George Mann

West Jefferson Levee District

Mr. Theron J. Bergeron
Mr. Gene Orgeron
Mr. Frank L. Muscarello
Mr. Jerry Womack
Mr. Ron Beeson

ST. FRANCIS BASIN PROJECT, MISSOURI

STATEMENT OF LARRY DOWDY, CHIEF ENGINEER, LITTLE RIVER DRAINAGE DISTRICT

Senator COCHRAN. We are happy to hear now from Mr. Larry Dowdy, chief engineer of the Little River Drainage District.

Mr. DOWDY. Mr. Chairman, thank you.

Mr. Chairman and members of the committee, my name is Larry Dowdy. I live in Cape Girardeau, Mo., and serve as maintenance supervisor for the Little River Drainage District of southeast Missouri. My testimony will relate specifically to the 1985 appropriations for the St. Francis basin project of the Mississippi River and tributaries project.

I am testifying today on behalf of levee and drainage districts within the St. Francis basin in southeast Missouri and northeast Arkansas. Most of these locally tax funded and operated drainage and levee districts are dependent upon others for their outlets into the St. Francis and Mississippi Rivers.

The fiscal year 1985 budget includes $6.3 million for the St. Francis basin project, which is a small increase over 1984. We are asking for an appropriation amount of $10,210,000, which is slightly more than $4 million over the President's budget, but is almost $2 million less than what the Corps has capability for. The additional moneys would be spent on four items in Missouri; namely, extension studies on ditch No. 1, Castor River, ditch No. 259, and the construction of one county bridge. This will require $740,000 of the additional funds requested. The balance of funds will be used in Arkansas on construction of 13 bridges on upper Buffalo Creek, construction of Stateline Channel, three bridges on ditch No. 29, and the alteration of a railroad bridge on Oak Donnick. These budget amounts will allow much needed work to be initiated in both Missouri and Arkansas, for which we are grateful.

We would like for you to take note that the increases over fiscal year 1984 are mostly being spent for construction items in the budget and not for engineering and design, or supervision and administration. You will recall that last year Mr. Burrell Fair, chief engineer for the St. Francis Levee District of Arkansas, expressed his disfavor with the Corps of Engineers high percentage of funds from the St. Francis basin project being used for nonconstruction items.

We want to thank this committee for their taking notice of this imbalance and for the Corps positive response to the committee's request that more moneys be used on actual construction. This does not mean in any way that we do not support the need for these items, but that a more favorable balance needs to be maintained from year to year of construction moneys versus nonconstruction moneys.

We greatly appreciate being given this opportunity to appear before this committee and to make you aware of the needs of our area. We are confident that our requests will receive the same positive considerations afforded us in the past.

We have a number of individuals present with us today who have traveled great distances and who have taken time away from their busy schedules to show their continued support for the St. Francis basin project. We also support the other requests made by the other witnesses of the Lower Mississippi Valley Flood Control Association.

Thank you.

[The statement follows:]

STATEMENT OF BURRELL B. FAIR, CHIEF ENGINEER, ST. FRANCIS LEVEE DISTRICT OF ARKANSAS

My name is Burrell B. Fair, I live in West Memphis, Arkansas, and I am Chief Engineer of the St. Francis Levee District of Arkansas. I am filing this statement in support of the appropriation for the St. Francis Basin Project, a tributary project under the Mississippi River and Tributaries heading. Oral testimony for this project is being presented by Larry Dowdy, Maintenance Supervisor of the Little River Drainage District, Cape Girardeau, Missouri.

The St. Francis Basin Project provides essential flood control and drainage work in the entire St. Francis Basin, Arkansas and Missouri. The only outlet for the drainage from the Missouri portion of the Basin is through Arkansas and the complex interstate system of levees and channels is of great economic importance to both states. Flood control and drainage interests in both states fully support the project.

The FY 1985 Budget includes the sum of $6,300,000 for the St. Francis Basin. This provides for the construction of a number of items in both states to continue the construction program being carried out by the Corps of Engineers. However, the addition of several items and the allowance for increased progress on some of the budgeted items would provide important benefits and allow better utilization of the funds spent on the overall project.

We understand that the Corps of Engineers is capable of expending a considerable amount in addition to that provided in the Budget. The additional funds could be utilized for studies to determine the feasibility of extending Ditch No. 1, Castor River and Ditch 259 in Missouri, for county bridges on Ditch 281, Upper Buffalo Creek and Ditch 29, for the State Line Outlet Channel and Blackfish Bayou Channel and for the construction of a railroad bridge in the Oak Donnick Floodway.

We urge that you recommend an appropriation of $10,210,000 for the St. Francis Basin Project for Fiscal Year 1985. We fully support the requests being made by other representatives of the Lower Mississippi Valley Flood Control Association for a total appropriation of $369,575,000 for the Mississippi River and Tributaries Project.

Yazoo Basin Projects, Mississippi

STATEMENT OF NEWMAN BOLLS, MISSISSIPPI LEVEE BOARD

Senator Cochran. Thank you, Mr. Dowdy.

Now we will hear from Newman Bolls, chief engineer of the Mississippi Levee Board at Greenville.

Mr. Bolls. Thank you, Mr. Chairman. Good morning. This is a real good morning for us because this is a rare occasion to be able to sit and look at such two distinguished Senators from your own State--you, Senator Cochran, and our deeply respected Senator Stennis.

Anything that I could say really would be anticlimactic, Mr. Chairman, after the fine opening remarks that you made. But I will say that I have a great assurance after these remarks and knowing the great store of information that you and Senator Stennis have for this basin in testifying this morning, and the assurances we will carry back to Mississippi with us to assure the people there and the people in the lower valley of the undivided attention that you have for these problems, the great show of compassion and generosity. I know that I speak for all of your constituents, not only in Mississippi, but in the lower Mississippi Valley, for this deep affection and consideraiton that you showed for us.

I have the opportunity this morning of appearing for both the two levee boards in Mississippi, the board of the Mississippi levee commissioners in Greenville, and the Yazoo-Mississippi Delta Board in Clarksdale. We also have another group in Greenville, the Greenville Port Commission and the Washington County Board of Supervisors in attendance as well. Each of us—Mr. Mooney from Clarksdale, Col. John Brennan from the port commission, and I have written statements. I will limit my brief remarks to the Yazoo basin and the Mississippi Valley.

Again, it is an easy situation to relate these things because I know of your personal involvement, the statements that Senator Stennis has made about his experiences in the 1973 floods when he flew over that area with then President Nixon, and Senator Cochran, your baptism of fire when you found out in 1973 that hipboots weren't tall enough to get through that backwater area of the basin. So I know that you both have a very personal knowledge and involvement in the problems that we face in the Yazoo basin.

The Yazoo basin is really unique. Each project relates to the other. So even though they are separated in the budget and might be separated as far as some people are concerned, we have to look at the total project in the Yazoo basin because it is not one that does not directly affect the other.

We all realize the fiscal restraints that we are facing up in this great Nation of ours. We are willing to do our part. But we consider these to be requests in matters of great capital investment to preserve the great lifestyle and the great Nation that we have. So we do not look at them as just expenditures that are going to be made and then forgotten, because they are truly capital investments. They will be things that will return to this great Nation of ours many, many times in the future what they cost.

We also feel that we need to proceed with this because of the inflation. The principal project that I am going to talk about this morning is the Yazoo backwater project. It was authorized in 1941, 43 years ago, and we are still striving for moneys to complete this project. We have other projects in there that have great need, but these projects are being delayed by being shunted aside, and the cost is reaching alarming proportions now. I think it is time for us to really step forward and to see that these funds are made available to complete these so that this cost will not reach even higher levels.

We have tried to analyze this and our two levee boards have tried to look at this very realistically. We know the constraints we are operating under. We have tried to place priorities on our requests that can still keep us proceeding at a reasonable pace and still keep us and our association within reasonable bounds of fiscal expenditures.

We are requesting for the Yazoo backwater area an additional sum of money. We come forward, you might say, in the sense of desperation. We are on our knees begging because we are hurting.

Unfortunately, Senator, in your opening remarks you mentioned the project in the Vicksburg District, how much financial loss they had last year alone in the April, May, and June floods. You did not include in those remarks what occurred and what was lost in December, January, and February of that year. Unfortunately, a great deal of those losses that you related this morning occurred in the Yazoo basin, a great number of those losses occurred there, really an unreasonable amount of them.

So we think the losses that occurred just in that 1 year alone will more than justify and support the request that we are making, the rapid completion of this project.

YAZOO BACKWATER, PUMPING PLANT

The Yazoo backwater project, the pumping plant, is a very critical item. We are requesting an increase in appropriations for the start of construction on that project. The design is rapidly approaching completion. We think that it is appropriate that construction be started.

Greenwood, Miss., is another item in the budget, that the city of Greenville suffered two floods last year alone. We are requesting a modest increase so that the Corps of Engineers can complete their plans and study for Greenwood to alleviate recurrences of this great flooding that occurred in that area.

The upper Yazoo project provides the outlet for the entire drainage system of the Yazoo basin. Again that needs to be expedited because if you do not have adequate outlets, none of the other work you do is satisfactory.

The tributary items of the Yazoo basin also need some additional funding because they provide the necessary outlets for the major reservoirs and for the entire north end of the Yazoo basin.

All of these figures are supported very strongly in the statements that Mr. Mooney and I have presented to the committee. I will not go into any more detail on those.

GREENVILLE HARBOR, MISS.

Col. John Brennan of the Greenville-Washington County Port Commission has filed a statement. Perhaps the entire port commission is up here at this time supporting this.

I would very hurriedly like to read just a very short statement that Colonel Brennan has asked I read; that in addition to the statement that I have presented on the Yazoo basin, I would also like to present to you for your very honest evaluation and consideration a statement from the Greenville Port Commission regarding the Mississippi River and tributaries project for improvement and expansion of the Greenville port. This project, which is vital to the economic development of the central portion of the delta which includes parts of Arkansas and Louisiana, will stand on its merits.

The Greenville Port Commission and the Washington County Board of Supervisors are prepared to do any and everything required to move this project forward, and they have shown in the past that they will do it. They took the stabilization and paid for that part for 3 or 4 years. So I think they have demonstrated in the past they are willing to do it.

Mr. Chairman, we express our deep appreciation for the generosity that this committee has always shown in the understanding of our problems. We hope that if there is anything that we can answer or provide you with, that you will call upon us.

Senator COCHRAN. Thank you very much for your excellent statement, Mr. Bolls.

[The statements follow:]

STATEMENT OF NEWMAN BOLLS, CHIEF ENGINEER, BOARD OF MISSISSIPPI LEVEE COMMISSIONERS

I am Newman Bolls, Chief Engineer of the Board of Mississippi Levee Commissioners, Greenville, Mississippi. It is my privilege this year to act as spokesman for the citizens in the Yazoo Basin embraced within the two Levee Boards: the Board of Mississippi Levee Commissioners in Greenville, and the Yazoo-Mississippi Delta Levee Board in Clarksdale, Mississippi. Mr. Joe Mooney, Chief Engineer of the Yazoo-Mississippi Delta Levee Board, will submit a statement supporting these askings.

The Lower Mississippi Valley Flood Control Association will present a general statement and request an appropriation for $278,580,000 for the construction, surveys, and advanced engineering for the Mississippi River and Tributaries Project for FY85. After analyzing this statement, these Levee Boards support these requested appropriations, feeling very strongly that these funds will allow for the orderly and efficient prosecution of the Mississippi River and Tributaries Project. We fully understand the fiscal problems of this great nation, but we feel these requests are not out of line and will return many times their initial investments over the years.

I will specifically deal with the Yazoo Basin in Mississippi, and a table of these individual projects showing the 1985 budget and requested appropriations is shown below:

YAZOO BASIN, MISSISSIPPI

PROJECT	FY85 BUDGET	TOTAL REQUESTED
Big Sunflower	$ 1,092,000	$ 1,092,000
Greenwood	375,000	1,375,000
Main Stem	575,000	575,000
Tributaries:		
Except Ascalmore-Tippo, Opossum	4,208,000	6,308,000
Ascalmore-Tippo, Opossum	3,882,000	3,882,000
Upper Yazoo Projects	3,560,000	6,760,000
Yazoo Backwater	2,678,000	3,678,000
Sardis Lake (Dam Safety)	100,000	100,000
	$ 16,470,000	$ 23,770,000

The Yazoo Basin in Mississippi is a unique area and is, without question, recognized as being one of the most productive agricultural areas in the world. It also is highly diversified with many industrial developments in this area. This region is absolutely dependent upon adequate flood control and interior drainage for its very survival. The project as designed is very complex and each item listed above must be considered a part of the whole in order for the project to function properly. We have made specific monetary recommendations for increases in certain projects in this Basin and strongly contend that these are capital investments which will greatly expedite the completion of this very important and necessary work, and as has been shown on so many occasions, the return will far outweigh the initial expenditures if the completion of these projects is expedited. During the flood event that occurred in May and June 1983 in the Vicksburg District alone, there was an estimated $226 million in damages, but the completed or partially completed work prevented an estimated $143 million in additional flood damages. This should clearly demonstrate the value of the project and the need for its completion.

The main line levees along the lower Mississippi River continue to be the most important feature of the Mississippi River and Tributaries Project and are our first line of defense. It is, therefore, imperative that sufficient funds be provided on an annual and continuing basis to assure the programs for strengthening these vital and irreplaceable flood control structures. The Yazoo Basin is in the most vulnerable position in that the levees in this reach of river must safely pass the greatest volume of water in the entire lower Mississippi River Valley from a drainage area that embraces approximately forty-one per cent of the drainage of the Continental United States. We who live in this area have no option except to maintain and strengthen these great structures or face certain destruction. The additional money that we request in this year's budget is to provide the necessary funds to enlarge and strengthen these structures by landside berms in order to ensure their continued integrity.

The Yazoo Backwater area in the lower end of the Yazoo Basin shoulders a heavy burden for the rest of the project. During times of high water, this area must store the accumulated discharge from the improved water sheds of the Big Sunflower River and Steele Bayou until it can be safely discharged into the Mississippi River by gravity flow. A pumping plant was authorized in 1941 (forty-three years ago) to evacuate the water by pumping during periods when discharge by gravity flow is impossible. All of the necessary planning and studying for this pumping plant has been completed and approved and the actual design of the plant is well underway. Having observed the procedures of the Corps of Engineers for thirty years and analyzing the progress that has been made on the design of this pumping plant, I feel absolutely confident that a construction start could be made in the summer of 1985 for the excavation of the inflow or discharge channels for this pumping plant that would in no way interfere with the progress of the design of this plant. We respectfully request and place the highest priority for a line item to be placed in the 1985 budget that would authorize the appropriation of $1 million to be used to initiate construction of the Yazoo Backwater Pumping Plant. We feel that this project should carry the highest priority of any of the other projects within the Basin.

The other interior drainage projects in the Yazoo Basin are separated into features on the Yazoo River and its tributaries and the Big Sunflower River - Steele Bayou and their tributaries. We feel at this time that the Big Sunflower River phase of the project is sufficiently funded and, therefore, do not ask for any consideration of any additional funds.

The Yazoo River Basin project is divided into many segments which are: the Upper Yazoo Projects, the Main Stem, Tributary Items, the Reservoirs and Greenwood. They are so inter-related that you must consider each project as a part of the whole for it to operate efficiently.

We visualize the problems of Greenwood as carrying the second highest priority for the Basin inasmuch as during the previous spring, major portions of this city were inundated on two separate occasions. The human suffering and financial loss was very great and we respectfully recommend an emergency increase in appropriations of $1 million for a total appropriation of $1,375,000 which will permit the completion of the study and planning to alleviate the recurrence of these great losses. We feel most earnestly that this should receive a very high priority and consideration.

For any of the projects to operate efficiently, there must be adequate discharge capacity on the lower Yazoo River. The channel improvement project to provide this relief is titled as the Upper Yazoo Projects. For the four major reservoirs to operate at the peak of their efficiency, to alleviate the flooding in Greenwood, to allow for the upper tributary items to discharge their design capacity, the construction of the Upper Yazoo Project, which is designed to channel the main stem of the Yazoo River, must proceed expeditiously. The 1985 budget recommended $3,560,000 for this work. However, after analyzing the needs for and the capabilities for the Corps of Engineers, we recommend a total appropriation of $6,760,000 for this critical work. We feel strongly that the Tributary Items, except for Ascalmore-Tippo and Opossum Bayous, is under-funded. The budget request of $4,208,000 should be increased to a total of $6,308,000 to allow for additional levee and channel work on Pelucia Creek. This will expedite this work by upwards of six months.

We in the Yazoo Basin have always prided ourselves as being patriotic, self-sacrificing citizens. This is evidenced by the vast expenditure of local taxes to support and finance the critical flood control and drainage problems so greatly affecting our area. We know full well that the leadership of our country must unite in the total effort to control inflation and work for a balanced budget. We conclude that every area and interest in our society must participate in this total effort. The failure to do so and thereby bring our economy back into balance will mean the utter collapse of America and with it the free world. We are willing to do our part. We are agreeable to well thought-out reductions that will not jeopardize the overall economy and effort and ask only that we be treated fairly, which I am certain this committee will do.

If, in the wisdom of this committee, it is deemed appropriate to expand this capital investment program, we would respectfully recommend that any additional funds be applied according to priorities established in the preceding statement. We most earnestly believe these are projects of the highest priority and will yield the greatest returns on their investment.

We are most grateful for the careful and serious consideration that you have always given our requests and wish to thank you and commend you on the job that you have always done so well in providing funds for these most beneficial projects.

STATEMENT OF JOSEPH F. MOONEY, JR., CHIEF ENGINEER, BOARD OF LEVEE COMMISSIONERS FOR THE YAZOO-MISSISSIPPI DELTA

I am Joseph F. Mooney, Jr. of Clarksdale, Mississippi. As Chief Engineer for the Board of Levee Commissioners for the Yazoo-Mississippi Delta, I have the privilege of submitting this statement in behalf of the Board and of the citizens of the Yazoo Basin.

We support the Lower Mississippi Valley Flood Control Association in the request for Fiscal Year 1985 Appropriations to the Mississippi River and Tributaries Project. This statement will address some of the urgent needs in the Yazoo Basin not provided for in the 1985 Budget.

We respectfully request that the budget amount of $16,370,000 for the Yazoo Basin be increased by $7,300,000 with the increases to be applied to the following specific items:

GREENWOOD	increase by $1,000,000 to $1,375,000
TRIBUTARIES (Except A-T-O Bayous)	increase by $2,100,000 to $6,308,000
UPPER YAZOO PROJECTS	increase by $3,200,000 to $6,760,000
YAZOO BACKWATER (for Steele Bayou Pump Plant)	increase by $1,000,000 to $3,678,000

The needs to be provided for and comments on the items of work in the Yazoo Basin are set forth on the following pages.

The projects collectively referred to as the Yazoo Basin provide for the protection of 6600 square miles of the rich, alluvial delta and 6800 acres of rolling hill land. While the area protected is largely agricultural land, there are several small to medium sized cities, and numerous towns and communities that are dramatically affected by the effectiveness of these projects. The farm products and light industrial goods produced in the region contribute significantly to the wealth of our nation and to our balance of trade.

The plan of protection for the Yazoo Basin consists of;

1. Mainline Mississippi River Levees along the west edge of the basin.

2. Arkabutla, Sardis, Enid, and Grenada reservoirs to intercept and regulate the runoff from the hill portion of the basin.

3. Tributaries Item which provides for improvement of the streams carrying runoff to the Yazoo-Tallahatchie-Coldwater system from the reservoirs on the east and vast areas of the Delta on the west.

4. Main Stem Item which provides for levees and other required structures along the Yazoo River.

5. Greenwood to provide the protection works around the City of Greenwood.

6. Upper Yazoo Projects is the improvement of the main channel of the Yazoo-Tallahatchie system to provide the outlet for the entire basin. When complete, the work is expected to lower flood flowlines about five feet and greatly reduce the need for levees and related structures along the main stem.

7. Yazoo Backwater Project protects nearly 1,000,000 acres in the lower delta from backwater flooding of the Yazoo and Mississippi Rivers.

8. Big Sunflower - Steele Bayou Project is the improvement of the primary outlet channel for the western delta and the City of Greenville.

Each element of the project is of great importance, nevertheless, the limitations of financial resources at any particular time requires that some priority be assigned. Recent experiences in the basin suggest an order of priorities that protects life and structural property, that provides major outlets for storm waters, and that considers the longevity of the item of work.

GREENWOOD - We request the increase of $1,000,000 in order to advance the design of the Fort Pemberton Cutoff and two pumping plants within the city.

TRIBUTARIES - We request the increase of $2,100,000 to start the Levee #2 on Pelucia Creek and the pumping station on the North side of the creek.

These two items affect residential areas within the City of Greenwood, on the outskirts of the city, and in the county South of the city. Portions of these areas have flooded repeatedly in the series of wet years in the past decade. Only the slimmest of margins in several of these incidents has separated them from being absolute catastrophes. The construction of the works referred to will provide a high degree of safety and security to the citizens of the Greenwood area.

UPPER YAZOO PROJECTS - We request the increase of $3,200,000 to expedite the construction of channel item 2B and to provide money for the stabilization of the riverbank at the south end of the Town of Belzoni. The present caving banks are threatening valuable commercial facilities such as grain elevators, and are reducing the land available for the placement or improvement of the Yazoo River levees. The need for orderly and rapid progress on the Upper Yazoo Projects has been impressed upon us all this past year when the tributary reservoirs were full to overflowing. Even with a summer drought and extremely careful management by Corps of Engineers personnel, the channel capacities were severely taxed. Before the reservoirs were pulled down to the pool stages, the rains of December were filling them again.

YAZOO BACKWATER - We request the increase of $1,000,000 to provide money for the initiation of construction of the Steele Bayou Pumping Plant. We realize that the Corps of Engineers has expressed a capability for construction of elements associated with the Greentree Reservoir, but we feel the Steele Bayou Pumping Plant should be assigned the priority. The project has been on the books since 1941; damages resulting from the lack of the pumps has occurred with regularity; and the spirits of the people would be lifted by seeing the project finally underway.

We sincerely appreciate your careful attention to our recitation of our needs and the knowledgable way in which you present our case to the balance of the Congress. We respectfully request that you recommend the increase of $7,300,000 for the Yazoo Basin as well as supporting the request of the Lower Mississippi Valley Flood Control Association for Fiscal Year 1985 appropriations to Flood Control, Mississippi River and Tributaries.

STATEMENT OF JOHN BRENNAN, PORT DIRECTOR, PORT OF GREENVILLE, MISS.

Mr. Chairman, Committee Members, my name is John Brennan. I am the Port Director, Port of Greenville, Mississippi.

I thank you for the privilege to present to you this statement regarding the Greenville Harbor Project so vital to the economy and well being of our community and the State of Mississippi.

Greenville is a shallow draft river port located on the Mississippi River just 100 miles north of Vicksburg. It is located in the heart of what we call the Mississippi Delta area. This is one of the richest agricultural areas in the world, and it produces principally cotton, soybeans, rice, wheat, and farm-raised catfish.

The Port of Greenville is dedicated to serve this agriculture industry as well as to expand our industrial development.

Mechanization of the agricultural industry has created a problem in this area of underemployment and unemployment, and we are trying to alleviate this situation by promoting industrial development; to balance agriculture with industry programs. The Port of Greenville is vital to that mission.

We in the Greenville Community have had a partnership with the Federal Government from the days of the great Mississippi River flood in 1927. Greenville was on an old bend of the river as it meandered through the alluvial valley. The river had a number of long, circuitous curves, the elimination of which became a part of the general plan for flood control on the Mississippi which was developed after the 1927 flood.

The Mississippi River and Tributaries Act passed by Congress in 1928 included as one of the means to alleviate floods, besides the levees and upstream bank stabilization, cutoffs on the river, to shorten the river by about 150 miles to improve the hydraulic efficiency. In so doing, the Port of Greenville was created as a slack water port some eleven miles in length, known as Lake Ferguson.

The Corps of Engineers at that time agreed that they would keep Greenville on the river as a viable port. They accepted the responsibility for maintaining the harbor entrance as a maintenance feature of the Mississippi River and Tributaries Project.

The initial project in development of the Port of Greenville, created in 1962, provided for widening the channel and building the facilities to improve the capability to handle traffic. The project was completed in 1 year at a Federal cost of $2,864,500 with local participation of $2,316,000.

Upon completion of this first phase of our harbor development, the flood free industrial sites along the improved channel were committed to industry within four years. Therefore, in 1967 action was initiated through the U.S. Army Corps of Engineers and the Congress to obtain authorization and funding for the harbor expansion project currently under consideration.

The project consists of widening about a mile and one-half of the present entrance channel, widening and deepening about one mile of inner harbor channel and extending the inner harbor channel approximately two miles. The dredged material from this operation will be placed along the bank line to build up about 360 acres of industrial sites. A graphical depiction of the Expansion Project is attached to this statement.

This project, initiated over 15 years ago, was authorized by Congress in the 1974 Water Resources Development Act followed by an appropriation of $200,000 for preparation of the General Design Memorandum, Phase I, Plan Formulation.

An additional $300,000 for advanced engineering and design was appropriated in Fiscal Year 1976 and another $400,000 for the same purpose was appropriated in Fiscal Year 1977 during President Ford's administration.

Notwithstanding this expression of the will of Congress, this $700,000 appropriation was frozen in the office of the Chief of Engineers by President Carter when he took office in 1976.

The project has been held at this level throughout the four years of the Carter administration and continues in this status under the present administration as new water resource policy guidelines are being formulated.

The Washington County Board of Supervisors and the Greenville Port Commission have provided assurances through the Corps of Engineers and the Secretary of the Army to meet all local requirements for cost sharing. Required lands have been purchased, Environmental Impact Statements have been approved, and total support has been voiced for completion of the Project at Public Hearings conducted in accordance with Federal and State regulations.

As presented to the Committee in previous testimony by the U.S. Army Corps of Engineer representatives, the Greenville Harbor Project was updated and approved by the Chief of Engineers on 22 February 1982. Based on October 1981 prices, it is now estimated to cost a total of $36.9 million; $25.9 million Federal costs, and $11 million local costs. At the time of authorization and funding in 1974, these totals were $17.6 million Federal and $4.8 million local costs. The benefit to cost ratio then was 5 to 1. Now it is a very attractive 8 to 1 ratio.

The total annual tonnage through the Port of Greenville during Calendar Year 1981, the latest statistics available from the U.S. Army Corps of Engineers, was slightly over 2 million tons. Of this total over 700,000 tons were home grown agricultural products, soybeans, wheat, rice, and corn, shipped out into the export market.

The community of Greenville, Mississippi, population 48,000 with 60% minorities and an economically depressed area with the lowest per capita income of the 50 States, is highly dependent upon the jobs generated and economic opportunities provided through the progressive healthy growth of the harbor front industries and facilities which number over 40 installations at the present time. The Port is the area's greatest single economic asset, generating some 3200 jobs and about a $55 million annual payroll. The total impact on the Delta area as a whole, both direct and indirect benefits, amounts to some 10,000 jobs and about a $100 million payroll. The benefits from the Port extend throughout the Delta area to some 12 counties.

The economic losses over the past eight years due to the lack of adequate harbor facilities while awaiting action at the Washington level are immeasurable. Inflation alone over these past eight years has more than doubled the estimated cost of the project. We have not one square foot of unoccupied harbor front sites available today to meet the requirements of industries desiring to expand in Greenville or for new water oriented industries desiring to locate in Greenville.

Mr. Chairman, Committee Members, on behalf of the many citizens whose livelihood depends upon our Port services, we urge your favorable consideration to move this highly beneficial project off dead center in order that we might start construction at the earliest possible date.

Thank you very much for this opportunity to appear before you.

STATEMENT OF WILLIAM C. BURNLEY, JR., MAYOR, GREENVILLE, MISS.

This statement is to advise you that the City Council, Greenville, Miss., acting in behalf of the citizens of Greenville, fully support the statement presented to your committee by the port director, Greenville Port Commission. We urgently request your favorable consideration of the request submitted so that we may move forward in the city of Greenville to develop this singular natural resource we have, the Greenville Port, for the economic development of our community and enhancement of the quality of life for the members of our city.

STATEMENT OF CHARLES JORDAN, JR., PRESIDENT, GREENVILLE (MISS.) AREA CHAMBER OF COMMERCE

This statement is to advise you that the Greenville Area Chamber of Commerce, Greenville, Miss., acting in behalf of the citizens of Greenville, fully supports the statement presented to your committee by the port director, Greenville Port Commission. We urgently request your favorable consideration of the request submitted so that we may move forward in the city of Greenville to develop this singular natural resource we have, the Greenville Port, for the economic development of our community and enhancement of the quality of life for the members of our city.

LOUISIANA MR&T PROJECTS

STATEMENT OF ARTHUR THEIS, LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

Senator COCHRAN. We will now hear from Mr. Arthur Theis, who is chief engineer for the Louisiana Department of Transportation and Development, Office of Public Works, Baton Rouge, La.

Mr. THEIS. Thank you, Mr. Chairman, and Senator Stennis. I am the chief engineer of the Office of Public Works for the State of Louisiana. My comments today are to summarize our written statement on the Mississippi River and tributaries project that we have presented in behalf of the State of Louisiana and also in behalf of the Association of Levee Boards of Louisiana and, in general, to support the budget allowance by the administration.

I would like to mention, however, Mr. Chairman, that the Association of Levee Boards of Louisiana is made up of some 23 different levee boards who have responsibility for over 800 miles of levees in Louisiana. Of that group, 17 are involved in the Mississippi River and tributaries project.

In addition to the statement that I have, a number of those levee boards have also filed written statements for the record and appreciate your including those in the record of this hearing.

OLD RIVER CONTROL STRUCTURE

I think I would be remiss if I didn't mention that the Federal Government has continued to recognize, and we certainly appreciate that fact, the value of the Old River Control complex which is so vital to the MR&T project in controlling the floods in the lower part of the basin and are responsible for distributing the main stem flow between the Mississippi River and the Atchafalaya River. That has continued to be recognized as the No. 1 civil works project in the United States.

The $67,300,000 proposed in the budget is also, I understand, the Corps capability. We certainly hope that the Corps will utilize this capability and continue that very vital project.

ATCHAFALAYA BASIN FLOODWAY

The remaining projects that I would like to comment on today are in regard to projects where we are asking the Corps capability rather than the Presidential budget. Downstream from this Old River Control Structure is the very vital Atchafalaya basin floodway that Senator Long referred to in his opening comments. This feature has been underway for some 50 years now, since 1928. It is still only capable, as Senator Long mentioned, of carrying about 67 percent of the project floods.

This particular project is of such vital interest to us that we think it is necessary we ask for more than the budget request and ask for the Corps capabilities. We believe that the year 2000 is such a distant date for completion of this vital levee system that the minimum appropriations that have been made to it in the past need to be revised so we can update this. So, we are asking that the $44 million be provided for that project. This is some $21 million over the President's recommendation. Only because it has such a vital impact on our State do we ask for that additional funding.

CHANNEL IMPROVEMENT AND MAIN STEM LEVEES

For similar reasons we are requesting larger support for channel improvements contained in the President's budget. The project above Louisiana is about 90 percent complete, but we are not that far along in Louisiana.

As you well know, the flood control project generally started in the upstream parts and has progressed downstream, where the majority of the work to be accomplished on the MR&T project now lies within the State of Louisiana. So we are asking that those sums be extended to provide for the Corps capability and, hopefully, increase our protection as well as expedite the completion of the project.

In addition to the $55 million in the President's budget, we are asking for an additional $25.4 million, making it a total then of $80.4 million for this purpose. That would include dredging that is vitally needed for our flood control, and a very vital revetment we need on the channel, particularly in the lower areas where we have such a large industrial complex and we cannot afford to have recurrences of the levee changes that we had last year that presented in Louisiana where we had a levee break that was quite devastating to that particular area. Luckily it didn't occur in an industrial location.

There are a number of levees in Louisiana that are still well below project grade. I am talking about levees other than those in the example on the main stem. These are primarily above Vicksburge, Miss., but there are also several of them below that area.

We are asking an additional $6.6 million above the President's budget amount that would utilize the full capability of the Corps of some $36.6 million in fiscal year 1985.

TENSAS BASIN, ARKANSAS AND LOUISIANA

Turning to the interior, for the Tensas basin project in northeast Louisiana, we are asking for the appropriation to be increased from $12.1 million to $13.1 million. That additional $1 million is for the Red River backwater levee project below the Red River levee project, and also to assist the land area which has suffered a hardship from continued backwater flooding. These two we think deserve additional attention in order that it can be completed as soon as possible.

These five critical projects we think deserve that additional attention, Mr. Chairman, and while we have a number of other projects mentioned in our brief, we believe these are the most urgent.

With your permission also, Mr. Chairman, we would like to submit and have submitted for the record additional information on the water resources projects in Louisiana similar to what Senator Long mentioned earlier. We would in general support the President's recommendations for the budget of those.

We certainly appreciate the opportunity to speak this morning and to present our comments on the recommendations and solicit your support for these projects, as you have always done, and if we can then increase these various project amounts in order to utilize the Corps capability where possible. Thank you, Mr. Chairman.

Senator COCHRAN. Thank you very much, Mr. Theis.

[The statement follows:]

STATEMENT OF THE LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT, OFFICE OF PUBLIC WORKS

MISSISSIPPI RIVER AND TRIBUTARIES PROJECT

The Louisiana Department of Transportation and Development, Office of Public Works is the agency designated to represent the State of Louisiana in the planning and orderly development of water resources. This statement is presented in behalf of the State of Louisiana and contains endorsements and recommendations for Fiscal Year 1985 appropriations for Louisiana projects in the Mississippi River and Tributaries Project.

In making the following recommendations, the State of Louisiana supports, in general, the budget recommendations of the President for Fiscal Year 1985, with some exceptions. We agree that a reduction of the projected deficits is a worthy objective, but at the same time point out that water resources projects are probably the most worthwhile projects receiving federal funding and have to withstand cost justification studies other projects are not required to undergo. Although these figures seem large, they are an infinitesimal portion of the national budget. We ask that this fact be considered when the final funding decisions are made.

MISSISSPPI RIVER AND TRIBUTARIES
SUMMARY OF RECOMMENDED APPROPRIATIONS

LOUISIANA PROJECTS	BUDGET ALLOWANCE	LOUISIANA REQUEST
Construction		
Atchafalaya Basin	$ 23,000,000	$ 44,000,000
Bayou Cocodrie & Tributaries	200,000	200,000
Channel Improvements	55,000,000	80,400,000
Mississippi River Levees	32,000,000	36,600,000
Old River, Louisiana	67,300,000	67,300,000
Tensas Basin, AR & LA	12,100,000	13,100,000
Boeuf & Tensas Rivers	(210,000)	(210,000)
Lake Chicot Pumping Plant	(3,514,000)	(3,514,000)
Red River Backwater Area	(2,885,000)	(3,885,000)
Tensas-Cocodrie Pumping Plant	(5,491,000)	(5,491,000)
Advance Engineering & Design		
Bushley Bayou Area (Phase I)	$ -0-	$ 300,000
Mississippi River Delta Region, Louisiana, Salinity Control Struct.	700,000	700,000
General Investigations		
Atchafalaya Basin (Water & Land Resources)	500,000	500,000
Boeuf-Tensas Basin	225,000	1,030,000
Larto Lake - Saline Lake Area	-0-	240,000
Operation and Maintenance		
Atchafalaya Basin	$ 9,429,000	$ 9,429,000
Bayou Cocodrie & Tributaries	98,000	98,000
Bonnet Carre Spillway	435,000	435,000
Channel Improvement	49,732,000	49,732,000
Lower Red River - South Bank Levees	290,000	290,000
Mississippi River Levees	8,492,000	8,492,000
Old River Control Structure	5,149,000	5,149,000
Red River Backwater Area	436,000	436,000

NOTE: The projects listed above are only those in Louisiana and directly affecting the State. We realize that there are others outside of Louisiana that are vitally important to the Project and in these areas, we endorse the recommendations of the Lower Mississippi Valley Flood Control Association.

ATCHAFALAYA BASIN
(Budget: $23,000,000) (Request: $44,000,000)

This project is a Main Stem component of the Flood control plan for the Mississippi River and Tributaries Project. The Mississippi River can safely carry only one-half of the project flood, or 1,500,000 cubic feet per second, below Old River; the other 1,500,000 cubic feet per second must be discharged through the Atchafalaya Basin. The levees which must confine this flow to the basin are now deficient because they have settled below original design grade due to consolidation of the underlying soils, and the design has been revised upward. This places the lives and welfare of 650,000 people and their property and improvements in 13 parishes in the immediate vicinity of the Atchafalaya Floodway in jeopardy each flood year. The tax assessment records indicate the value of potential flood losses to be approximately $8 billion, not including public improvements. Over the past half century we have supported the Mississippi River and Tributaries Project and have agreed that construction of flood protection works should start upstream and progress downstream. As a result, the Mississippi River and Tributaries Project is now more than 90% complete in sites upstream from Louisiana while the levees in the Atchafalaya Basin can contain only 67% of the project flood. Work on this project has been underway since 1928 and isn't scheduled for completion until the year 2000. We are, therefore, requesting that funding which will utilize the full capability of the Corps of Engineers be appropriated for this project in Fiscal Year 1985. We request that Congress utilize the full capability of the Corps of Engineers which is $44,000,000 for this project. This request is $21,000,000 over the President's budget.

CHANNEL IMPROVEMENTS
(Budget: $55,000,000) (Request: $80,400,000)

Channel improvements and stabilization provide protection of levees and the many improvements behind them, as well as preventing unsatisfactory alignment where the river's bank is unstable. This project is also a Main Stem component of the flood control improvement program for the Mississippi River and the benefits are the same as for the other main stem components. The Mississippi River and Tributaries Project above Louisiana is about 90 percent complete but to a much lesser extent within Louisiana. Because of the improvements upstream, increased flows are a major problem in Louisiana where the project is lagging. The additional funds we are requesting above the President's budget recommendation will provide for the dredging and revetment work necessary to accommodate these increased flows.

MISSISSIPPI RIVER LEVEES
(Budget: $32,000,000) (Request: $36,600,000)

Construction of mainline Mississippi River Levees in Louisiana also lags behind construction in the upper valley. The same reasons that apply to our request for additional funds for channel improvements on the Mississippi River and improvements in the Atchafalaya Basin, apply equally well to our request for additional funds for Mississippi River Levees. The additional $4.6 million will allow levee improvements at St. Gabriel and at English Turn. We are requesting that the full capability of the Corps of Engineers, $36,600,000, be appropriated for this important project.

OLD RIVER, LOUISIANA
(Budget: $67,300,000) (Request: $67,300,000)

This project is recognized as the number one priority item in the entire civil works program. The Old River project prevents the Mississippi River from changing its course to the Atchafalaya. Should this occur, the cities of Baton Rouge and New Orleans and many lesser communitites would suddenly be without sufficient quantities of fresh water for domestic and industrial needs.

A large investment by the United States in flood control and navigation facilities would be lost. Since the project is one of the Main Stem components for flood control on the Mississippi River, it is inseparable from the other components when calculating a composite benefit-to-cost ratio for the Main Stem project. The ratio of remaining benefits to remaining cost is 16.5 to 1. We are in support of the President's recommended budget and urge that $67,300,000 be appropriated for this all important project.

TENSAS BASIN
(Budget: $12,100,000) (Request: $13,100,000)

The increased funding for this project would be spent for construction in the Red River Backwater area for the construction of the Below Red River Levee and for the construction of the Sicily Island Levee.

This area is subject to extensive backwater flooding and construction of these items will do much to alleviate the problem of flooding in this area.

BOEUF-TENSAS BASIN, AR & LA
(Budget: $225,000) (Request: $1,030,000)

The Boeuf-Tensas Basin Study Area drains about 9,000 square miles in South Arkansas and North Louisiana. Problems being experienced and studied include urban and rural flooding, bank stabilization, water supply, recreation and fish and wildlife. Funds requested will be utilized to continue work on on-going basin-wide studies. The additional $805,000 above the proposed budget figure of $225,000 will advance completion of the study by twelve (12) months. We are, therefore, requesting that the full capability of the Corps of Engineers, $1,030,000, be appropriated for this project.

LOCAL CONTRIBUTIONS FOR FLOOD CONTROL IMPROVEMENTS

Historically, Louisiana has always done its part in cooperation with the Federal agencies concerned with flood control. The Louisiana State Board of Engineers, the forerunner of the Office of Public Works, was created in 1879 the same year as the Mississippi River Commission to coordinate the planning and construction of the required flood control facilities to protect the State. Since that time, local expenditures for flood control have exceeded $730,000,000. This amount adjusted to 1979 dollars represents expenditures in excess of $5.3 Billion. Nearly one-half of the potential flooded area of the Lower Mississippi River Valley lies in Louisiana. Local expenditres for flood control have increased with the growth of the valley. This record not only meets, but exceeds any National Water Policy local participation requirements ever put into practice.

The State of Louisiana, its Office of Public Works, in particular, wishes to commend the Appropriations Sub-Committees on Energy and Water Development and express our appreciation for the foresight and understanding exhibited in the past of the need for authorizing adequate levels of appropriations for water resources projects which are vital to the national interest. We solicit your further consideration of the recommendations presented herein.

NAVIGATION, HURRICANE PROTECTION AND WATER RESOURCES PROJECTS IN LOUISIANA

The Louisiana Department of Transportation and Development, Office of Public Works is the agency designated to represent the State of Louisiana for the coordinated planning and development of water resources including flood control, navigation, drainage, water conservation, and irrigation projects. Therefore, this statement is presented on behalf of the State of Louisiana. We are pleased to present the endorsements and recommendations for Fiscal Year 1985 appropriations to Louisiana projects. The projects listed herein are not contained in other separate statements by the Office of Public Works on the Red River Basin or the Mississippi River and Tributaries.

In making the following recommendations, regarding construction, surveys and some selected operation and maintenance items, the State of Louisiana, in general, supports the President's budget recommendations for Fiscal Year 1985. These recommendations are made, not because the projects are unworthy of higher funding levels, but because we agree that a balanced budget and reductions in projected deficits are worthy objectives and are in the best interests of the nation at this time. However, we also feel that water resources projects are probably the most worthwhile and cost-effective projects in the Federal budget, having to meet stringent economic justification criteria not required of other programs. We ask that this be taken into consideration in the final decision-making process to allocate the available funds.

PROJECTS	BUDGET ALLOWANCE	LOUISIANA REQUEST
Construction		
Lake Pontchartrain & Vicinity Hurricane Protection	$ 17,500,000	$ 17,500,000
Larose to Golden Meadow	5,100,000	5,100,000
Mississippi River, Baton Rouge to Gulf	2,000,000	2,000,000
Mississippi River, Gulf Outlet	2,000,000	3,600,000
Morgan City & Vicinity	280,000	280,000
New Orleans to Venice	4,800,000	4,800,000
Ouachita & Black Rivers	2,000,000	2,000,000
Authorized Surveys		
Amite River & Tributaries	150,000	150,000
Gulf Intracoastal Waterway, La & Tx Section	395,000	395,000
Lake Pontchartrain, West Shore	120,000	120,000
Louisiana Coastal Land Loss and Marsh Creation	110,000	110,000
Louisiana Coastal Shore & Barrier Island Erosion	125,000	125,000
Louisiana Coastal Water Supply	150,000	150,000
Mermentau-Vermilion & Calcasieu Rivers and Bayou Teche	540,000	540,000
Mississippi River - Gulf Outlet	-0-	-0-
Ouachita River Basin, AR & LA	715,000	715,000
Pearl River Basin	813,000	813,000
Mississippi River - Ship Channel, Gulf to Baton Rouge	1,000,000	1,000,000

Operation and Maintenance	Estimated Obligation	Louisiana Request
Atchafalaya River, Bayou Chene, Boeuf & Black	$ 2,970,000	$ 2,970,000
Barataria Bay Waterway	2,480,000	2,480,000
Bayou Bodcau Reservoir	580,000	580,000
Bayou Bonfouca	390,000	390,000

Bayou Pierre	35,000	35,000
Bayou Teche	350,000	350,000
Caddo Lake	177,000	177,000
Calcasieu River & Pass	11,240,000	11,240,000
Chefuncte River & Bague Falia	190,000	190,000
Freshwater Bayou	1,930,000	1,930,000
Gulf Intracoastal Waterway	12,360,000	12,360,000
Houma Navigation Canal	2,040,000	2,040,000
Inspection of Completed Works	851,000	851,000
Lake Providence Harbor	200,000	200,000
Madison Parish Port	215,000	215,000
Mermentau River	990,000	990,000
Mississippi River, Baton Rouge to Gulf	31,588,000	31,588,000
Mississippi River - Gulf Outlet	5,505,000	5,505,000
Mississippi River Outlets, Venice	1,110,000	1,110,000
Ouachita & Black Rivers	5,357,000	5,357,000
Pearl River	190,000	190,000
Red River Waterway - Mississippi River to Shreveport	1,614,000	1,614,000
Removal of Aquatic Growth	1,201,000	1,201,000
Wallace Lake	155,000	155,000

We ask that the amounts shown in the request column above be provided to these projects so that routine maintenance can be continued and these projects be operated as they were authorized to do.

We wish to express our thanks to the Appropriations Sub-Committees on Energy and Water Development of the House and Senate for allowing us to present this Brief on the needs of the State. Without reservation, practically every single project in Louisiana, which has been made possible through actions of these Committees, has shown a return in benefits many times in excess of that contemplated by the authorizing legislation. The projects which you fund affect the economy of not only Louisiana, but the Nation as a whole. The Office of Public Works appreciates accomplishments of the past and solicits your consideration of the appropriations requested for Fiscal Year 1985.

STATEMENT OF BOARD OF COMMISSIONERS, PONTCHARTRAIN (LA.) LEVEE DISTRICT

THE LEVEE DISTRICT

The Pontchartrain Levee District extends downstream from the city of Baton Rouge a distance of 114 river miles, includes the east (left descending) bank of the Mississippi River, and is comprised of portions of East Baton Rouge, Iberville, Ascension, St. James, St. John, and St. Charles Parishes. The east bank levee is continuous throughout the Levee District including the Bonnet Carre Floodway.

Extensive development of major industries has taken place to the extent that there is more industry located in the Pontchartrain Levee District than any other Levee District in the nation, perhaps the world. Along with industrial growth, our Levee District has witnessed a dramatic companion increase in residential and urban expansions. Substantial portions of prime agricultural lands have now been converted to other uses. Two nationally ranked deep-water ports are located in the Pontchartrain Levee District, the Baton Rouge Port and South Louisiana Port.

The District contains large diameter pipeline systems which pass through nationwide distribution points. Interstate Highway 10 and a number of major U. S. Highways traverse the Levee District, along with major railroads. The Mississippi River deep water channel for ocean going vessels and the proposed 55-foot channel are a part of the Levee District Area.

All these features and many other improvements are protected by the Mississippi River levee. Only through continuous, effective flood control improvements and maintenance can this area meet requirements to serve national needs for industry, employment, deep-water navigation, highway and rail transportation, major pipe lines, agriculture and related activities.

RECOMMENDATIONS

Mississippi River Levees (Amount Recommended: $36,600,000)

Construction of the Mississippi River levee in the Pontchartrain Levee District and elsewhere must be completed. The basic well being of the nation is dependent on its future flood control success in terms of economy, agriculture, industry, transportation, jobs, recreation, environment and many vast improvements throughout the river valley.

The Pontchartrain Levee District has reaches of levees which are below grade, sub-standard, or odd sections and otherwise do not meet Corps of Engineers design criteria. Serious seepage problems always accompany each high water. Some distances from levee toe to top bank are less than thirty-five feet. Wavewash damages are a year round threat, but, become more serious with high river stages when the unprotected riverside slope of the levee is exposed to rapid wavewash erosion.

One may ask why is it necessary to spend more money on levees. The best answer is the levee crevasse which occurred August 23, 1983, last year, in this Levee District, when the River bank revetment failed, and the Mississippi River main line levee broke. The underlying soils were overstressed and collapsed under the weight of the levee. A seven hundred foot length of levee settled and disappeared into the subsurface failure below. Emergency efforts were undertaken immediately to construct a levee setback. A number of families, their residences, a State Highway, power lines, telephone lines, gas lines, water main pipe lines, industrial improvements, and local improvements were displaced. The State of Louisiana was most fortunate that this failure did not happen during the 1983 flood, the third highest of record. There are many other reaches and locations of levee which have failure potentials, and they can be prevented only by the Congress appropriating funds needed to make timely improvements to the levees and make them safe.

The Pontchartrain Levee District Board of Commissioners recommends $36,600,000 (an amount of $4,600,000 over the budget) be appropriated for FY 1985 for:

1) construction of levees for enlargement and re-shaping to meet standard section design requirements;
2) construction of slope pavement on the riverside of the levee where required, and;
3) construction of foreshore dikes and placement of rip-rap to prevent further erosion and loss of batture areas in critical reaches.

Channel Improvement (Amount Recommended: $88,000,000)

Main line levees must be protected from caving banks throughout the lower river reaches where extremely narrow battures are the last line of defense against crevasses and failures. There simply is no place left for levee setbacks in the Pontchartrain Levee District. The only proven remedy to stabilize these continually eroding banks is construction of revetment.

Funding for the revetment program over the past few years has continued to decline except in FY 1984 when boosted by the "Jobs Bill". This is a matter of great concern to the Board of Commissioners, Pontchartrain Levee District since critical needs are broad and numerous in our Levee District and others in our area. Annual levels should not be reduced until overall needs have been met. The Pontchartrain Levee District urges Congress to appropriate $88,000,000 for FY 1985 (which exceeds the budget by $33,000,000).

Old River (Amount Recommended: $67,300,000)

The Old River Control structure system is the key to control and allocation of river flows in the lower Mississippi River. The MR & T Project cannot be successful without effective Old River control structures. Therefore, the Board of Commissioners, Pontchartrain Levee District urges Congress to continue funding of the alternate and existing structures according to the capacity of the Corps of Engineers. Construction should be completed as soon as possible. We recommend $67,300,000 for FY 1985, which agrees with the budget amount.

Lake Pontchartrain & Vicinity, Hurricane Protection Project.

A seldom remembered feature of this Hurricane Protection Project is that portion which extends above the New Orleans City area and around Lake Pontchartrain. That segment designated for St. Charles and St. John Parishes is in the Pontchartrain Levee District and remains a great concern to the Board of Commissioners. In the period 1968 to 1970 this Levee District purchased necessary rights-of-way for construction of the Hurricane Protection Levee along the Lakefront shoreline as designated by the Corps of Engineers. Subsequently, a number of reviews and re-studies have been made of the Project while no construction has been undertaken in the Pontchartrain Levee District.

Hurricane protection is advanced in the New Orleans area, and not further around Lake Pontchartrain, then the end result is that the hurricane high stages will be forced into those unprotected, adjacent areas, namely St. Charles and St. John Parishes, resulting in much higher flooding and for extremely longer periods of time. One area should not be protected at the expense of another. The entire project should be advanced in a manner to provide benefits to the total area affected.

The Board of Commissioners, Pontchartrain Levee District, recommends to Congress that adequate funding be provided for construction above New Orleans, in St. Charles and St. John Parishes, on a coordinated basis with respect to the overall plan, as soon as possible.

CONCLUSION

The Board of Commissioners, Pontchartrain Levee District, compliments the Subcommittee on Energy and Water Development for the keen understanding of the real needs of the MR & T Flood Control Project and the efficient, responsive actions taken to appropriate funds for its many complex requirements. We endorse recommendations presented by the Association of Levee Boards of Louisiana, Louisiana Office of Public Works and Lower Mississippi Valley Flood Control Association.

FY 1985
SUMMARY OF RECOMMENDED APPROPRIATIONS
MISSISSIPPI RIVER & TRIBUTARIES PROJECT

Item	Recommended Appropriation	President's Budget
Levees	$36,600,000	$32,000,000
Channel Improvement	$88,000,000	$55,000,000
Old River	$67,300,000	$67,300,000

COMMISSIONERS	PARISH
Aubrey LaPlace, President	Iberville Parish
Jesse Bartley, Vice President	Ascension Parish
Stephen Cupit	St. John the Baptist
Joseph Gautreau	Ascension Parish
Leroy Labat	St. John the Baptist
David Laborde	St. James Parish
Lawrence Moch	East Baton Rouge Parish

NEED FOR WATER RESOURCE AUTHORIZATION LEGISLATION

Senator COCHRAN. As you were making your presentations to the committee, I was thinking about the observation that we haven't had a water resources authorization bill in a number of years. There are two bills now before the Conpress, the House bill that is chiefly sponsored by Congressman Roe of New Jersey, and here in the Senate Senator Abdnor's bill that will be reported out of that committee. There is an indication that we could have action at an early date on that legislation. It touches on the cost-sharing that I think Mark Simmons mentioned. Part of your statement, Mr. Theis, is devoted to that issue, too.

I am impressed with the fact that according to your statement, over $5 billion in 1979 valued dollars has been spent by the State of Louisiana on flood control protection within this project area, and that certainly ought to be considered when people are talking about the fact that local interest should bear a greater part of the cost of these projects. This project was authorized a long time ago. It was recognized at that time that this was a national interest that was being protected, a national problem. This great productivity that is represented by the assets in the lower Mississippi River valley is of national importance. If it weren't for our productive agriculture sector, our balance of trade, which is already upside down, would really be a serious problem for economic well-being.

So, it was long recognized that this is a matter of everyone's concern, every citizen, not just those in the region that is directly affected by the flooding. So I am going to be among those urging that the current authorization not be changed by any new law which would require any new contributions or funds by local interests for the completion of a project that has been under construction for many, many years. I don't know how that argument is going to to come out, but it is going to be a subject of debate and it is a matter of concern for me and I know many, many others.

I don't know that anybody has made a contribution like you. It may be in a statement that I overlooked. I wonder how much we have spent.

Does anyone know, Mr. Bolls, in Mississippi, how much the State of Mississippi has spent on flood control within the project, the local interest share of the MR&T project? Would there be any way to calculate that?

Mr. BOLLS. Yes, Senator, there would be. We had some figures that are not updated, but something in the order of a half billion dollars from just our two levee districts. That is a very sizable, sizable thing.

ROCKY BAYOU, MISS.

Senator COCHRAN. I notice that Mark Simmons mentioned the Rocky Bayou project. That is in your area of interest. Last year the committee allocated some $2.9 million for the Rocky Bayou levee project, along with some guidance to the Corps of Engineers. How is that project progressing at this point? Newman Bolls can also answer it; either one.

Mr. Bolls. I have to profess ignorance on that. I am not completely familiar with it, Senator. I can try to get you some information on that.

YAZOO BASIN, PUMPING PLANT, MISSISSIPPI

Senator COCHRAN. I know that we also made available $2 million with some directions to the Corps regarding the engineering and design of the Yazoo pumping project that you alluded to in your testimony. We are going to be reviewing that project again with the Corps and hope that it can be expedited. That is, as you say, an essential element in this overall effort to protect the Mississippi area.

Mr. BOLLS. Senator, I can't speak directly to that. I assure you that the emphasis that you placed on that has expedited this more than we can describe. The speedup of the design of this project has been outstanding. I would predict that it probably is 2 or 3 years in advance of where it probably had been planned for at this time, which allows for the start of the construction next year if there are funds available and specified for construction in this project.

So there is no way that we can overemphasize or thank you for the advice that you gave our friends from the Corps to proceed with all haste on this because they have done a really outstanding job in expediting the design of this very, very vital and long-needed and long-authorized project.

I assure you that the money has been well spent. It has been accurately and intelligently spent.

Senator COCHRAN. I wonder if there is a reasonable expectation that these funds could be used for construction if they are provided by the committee.

Mr. BOLLS. I can't speak for the Corps, but I have spies everywhere. [Laughter.] I am sure by looking over the Corps shoulder and knowing their method of operation that they will have ample amounts of this design completed so that they could make a legitimate construction start on at least the excavation of the inlet and outlet channels by the middle of 1985. We are talking about May or June of next year. I do not think that that would be compromising anything that I know and that they know. But by virtue of the previous remarks we made about the speedup of their design of this at the direction of Congress, they will be in a ready position to initiate construction by the middle of next year, sir.

Senator COCHRAN. We appreciate very much having that information for the record. I know that will be helpful for the committee when it comes time to decide whether or not that would be a useful allocation of resources. We are confronting some very serious decisions about budget deficit problems as I'm sure you are aware. I recognize the fact that the request that is being submitted today is somewhat over the budget. We are going to have to carefully analyze it. We assure you that we will carefully consider your requests and the evidence and the basis for it that you presented to the committee so ably today.

We thank you for being here. That will conclude the testimony and the questions for this panel.

Because many of you will be leaving the hearing room at this time, the committee will take a 5-minute break to permit those who want to leave to do so.

Thank you all for being here.

[A brief recess was taken.]

OUACHITA RIVER BASIN PROJECTS

STATEMENT OF RICHARD FORD, REPRESENTING THE OUACHITA RIVER VALLEY ASSOCIATION

ACCOMPANIED BY:

EUNICE PLATT, EXECUTIVE DIRECTOR
JODIE MAHONY, MEMBER, ARKANSAS HOUSE OF REPRESENTATIVES

Senator COCHRAN. The subcommittee will please come to order.

Our next panel consists of the witnesses here testifying in support of the Ouachita River Valley Association and its projects.

Please proceed and identify yourselves for the record. We have written statements which will be made a part of the record in full. We invite you to make any summary comments that you like.

Ms. PLATT. Thank you, sir. I am Eunice Platt with the Ouachita River Valley Association. I feel I should be on flood control also because if you could see the Ouachita River right now, it is about 10 feet out of banks as of last Saturday.

This morning I am going to ask Professor Richard K. Ford of the University of Arkansas to present our statement. He is from Little Rock. He has done research for the Arkansas Waterways Commission and for the Ouachita River Basin Association. Then he will turn it over to the next speaker.

At this time, I would like to turn it over to Professor Ford.

Senator COCHRAN. Thank you very much, Miss Platt.

Mr. Ford, welcome.

Mr. FORD. Thank you, Mr. Chairman.

I am Richard K. Ford, a professor of economics with the University of Arkansas. I wish ~~to~~ thank you for the opportunity to appear before you today. I know that you are all very busy people, and I will not take much ~~of~~ your time. In fact, I only have a few words to say concerning the Ouachita River project.

ECONOMICS OF WATER TRANSPORTATION

Before I address the topic at hand, however, it seems appropriate to tell you why I, an academic economist from the University of Arkansas at Little Rock, am here in the first place. My area of expertise is water, or more specifically, water economics. For the past 2 years I have been serving as the economic adviser to the Arkansas Waterways Commission where I have expanded my area of academic interest to include the economics of water transportation. The chairperson of that commission is Eunice Platt, who also is the executive director of the Ouachita River Valley Association.

About 2 months ago she asked me to appear before this committee in her time allotment to discuss the economics associated with the Ouachita River project. Since then I have been investigating the south-central region of Arkansas through which the Ouachita River flows.

My comments to you today will be limited to the Arkansas stretch of the Ouachita River project as opposed to the entire project. However, I hope that you will not infer from this that the Louisiana portion of the Ouachita River project is any less important. After all, without the Louisiana portion of the Ouachita River project, Arkansas' part would be nonexistent.

The results of my investigation to date are contained in a working paper which I have submitted to this committee. My effort was confined to an examination of how four south-central Arkansas counties were doing along the path of economic growth and development. I compared these counties to both the State of Arkansas as a whole and their neighboring counties through various economic data series.

I have found that the four counties that economically interact with the Ouachita River project have achieved substantial better growth trends than their neighbors. Not only are their growth rates superior throughout several different series, but their outlook for future development is also positive. In short, I have found significant evidence to conclude that these counties are currently poised for the process of economic development.

The fact that the Ouachita River project is the only federally funded infrastructure system of note in south-central Arkansas makes the outlook for economic development really exciting. If economic theory is correct, and a certain amount of social overhead capital is required before economic development can take place, then its construction is most worthwhile.

Simply constructing the project, however, will not be enough. It must be properly operated and maintained. That is what we are here today to discuss.

I suggest that the amount of money requested for its operation and maintenance is small, both in terms of its construction and in relation to other competing uses for the same funds. If the Federal Government continues to maintain its commitment to economic growth and development through its continuing support of the Ouachita River basin, I am confident that the private sector of south-central Arkansas will respond in kind and use this waterway for which it was intended—as a catalyst for economic development.

With the remaining time, I would like to introduce Mr. Jodie Mahony.

Senator COCHRAN. Thank you very much, Dr. Ford.

I think Jodie was introduced by Senator Pryor when he was here.

Mr. MAHONY. Yes, sir.

Senator COCHRAN. Glad to have you here. You may proceed.

OUACHITA AND BLACK RIVERS, FELSENTHAL NATIONAL WILDLIFE REFUGE

Mr. MAHONY. Thank you, Mr. Chairman, Senator Stennis, and Senator Johnston.

It might be worthy of note that the uppermost city on the Ouachita River Valley 9-foot barge channel is Camden, which some of you might know is Senator Pryor's hometown. He has a personal interest in this project. He has maintained that both as Governor, as a U.S. Representative, and now as a U.S. Senator.

Excuse me. I didn't introduce myself. I am Jodie Mahony, State representative from Arkansas.

When we appeared before this committee last year, we had what was reputed to be the largest drainage river in the world and no access to it. By virtue of passage of legislation concurred in by the House, we now have the largest drainage reservoir. As of this summer and fall, we will have contracts for some access to it.

We are here today to ask you to continue with that process. You had given us $3.5 million of the approximately $10.5 million necessary to obtain access and minimal recreation facilities for that reservoir. Senator Pryor has proposed language which is included in a letter which would direct the Chief of Engineers to expedite construction in accordance with the design memorandum dated February 1981. In addition, it would also ask that one of the sites be operated, managed, and maintained by the Corps of Engineers in addition to all the others.

To facilitate that, $3.5 million, as I understand it, is included in that letter request to you from Senator Pryor. I am sure Senator Bumpers will be submitting testimony, but I have no hesitation in assuring you of his support. As a matter of fact, when he was Governor in 1971, he went to our game and fish commission and using non-Federal funds that they put up was able to buy the dam site and some 3,000 other acres which were necessary for the project to go forward.

It is estimated in the environmental impact statement that usage is 800 to 11,000 man-days per year. One of the real benefits of it is as a waterfowl wintering area which would have some 200,000 to 450,000 ducks, geese, using it.

The area is a very unique one, Senator Johnston, in that it is actually lower, as I understand it, than Monroe, La. That is why it was with a very small amount of increase in the height of the dam there you flood such a tremendous area. It acts as a holding pond, really, for the waters of the Ouachita and prevents them from doing more damage to Monroe than has been done in the past.

Another unique feature is it had always been a tremendous natural area for spawning of fish. They are going to put in a rubble dam there, and they can raise it as small as a half inch or an inch a day. What that does is gradually flood feeding areas for wintering waterfowl. Then in the springtime we would be able to hold that water in there, not damage the trees, but as those of you who fish know, when you have high water in the springtime in these river bottoms, then the fishing is always going to be good later in the year.

So, I think, without question, it is going to follow along the lines of Toledo Bend, et cetera, in terms of its attraction to fishermen and the hunting possibilities are great.

Everything went along fine. As we came up the Ouachita River at Jonesville and Columbia, those locks and dams were put in. The Corps came right along and put in the recreation facilities. They have managed them, maintained them. No problem, from 1973 up to until October of last year. And to say "the Corps" is to exaggerate because it is not the Corps of Engineers. It was the Assistant Secretary of the Army, Mr. Gianelli, as I understand it, who sent word down that just as the lock was getting ready to be closed and the area flooded, from 5,000 to 38,000 acres, and wiping out, of course, any access, that there were to be no access sites constructed by the Corps. There were to be no recreation facilities. They included access sites in there.

So we were left—it wouldn't be high and dry, it would be high and wet—with literally no access to this tremendous area.

We are asking you to again this year implement the second stage of this procedure and let us have the access to the area as was agreed by the Corps, by Fish and Wildlife, by everybody concerning the project until September–October 1982.

I appreciate your indulgence and your time.

Senator COCHRAN. Thank you very much for your contribution to our hearing.

Mr. MAHONY. Thank you.

Senator COCHRAN. We appreciate your being here, Dr. Ford and Mrs. Platt. You all have been good witnesses. I know we will find your statements very helpful to us as we approach the decisionmaking process on how we allocate these resources.

I might say that we provided some legislative guidance to the Corps of Engineers last year with respect to the recreation features and the importance of it and the fact that in the judgment of this committee it is an essential part of the project—a Federal responsibility. That legislative guidance was not exactly followed by Mr. Gianelli. He is leaving. I don't know why he is leaving. It doesn't have any connection between that and this, I am sure. [Laughter.] But I don't know whether to be encouraged about the fact he is leaving. We will have to wait and see.

But you can be assured that we will continue to insist that it is the intent of the Congress, as far as this subcommittee is concerned, and I think the subcommittee since it has spoken already on the issue will continue to speak with force on the issue and try to get that understood.

So, we are sympathetic to the concerns which you have expressed. Senator Pryor's statement to the committee earlier today is a strong indication of his feeling. He said that Senator Bumpers was also communicating his support for that action by the committee.

We will work with you on this and try to get it straightened out.

I think it is helpful to the committee to have your economic analysis of the project as it relates to Arkansas, and I am sure that Senator

Johnston, who is a member of the subcommittee, can eloquently provide an economic assessment of the project as it relates to Louisiana's interest as well.

Thank you all for being here.

I will recognize at this time Senator Johnston for any comments or questions he might have.

Senator JOHNSTON. Thank you, Mr. Chairman.

I just want to echo what these witnesses have said and what Dave Pryor has been telling us for a long time. This is a very, very vital project. It would be a tragedy to build a project like this and not have proper access and the recreational benefits. That is the biggest reason for it, and then not to provide the access would be silly.

I think you are going to find, as the chairman said, not only cooperation, but a lot of support out of this committee for what you are trying to do.

Mr. MAHONY. Thank you very much.

Senator COCHRAN. Senator Stennis, any comments or questions?

Senator STENNIS. Mr. Chairman, I am glad I got to hear this. I have talked to Senator Johnston many times about this project. He gives you a chance to talk to him and he follows up on it, too. So I think this matter is in good hands. I plan to support it.

Senator COCHRAN. Thank you very much.

Thank you for being here.

Mr. MAHONY. Thank you very much.

[The statements follow:]

STATEMENT OF THE OUACHITA RIVER VALLEY ASSOCIATION

This paper is written in an effort to explore the economic conditions that exist in the area around the navigable portion of the Ouachita River Project in the State of Arkansas. Since this navigation project is only now in the final stages of completion with respect to current congressional authorizations, insufficient time has elapsed for a complete evaluation of its economic effects on the surrounding region. However, some preliminary indicators can be collected and interpreted at this time which shed light on the probable economic effects of the Ouachita River Project in Arkansas.

This paper is not intended to be either the definitive work on this subject nor does it purport to be a complete enumeration of all data available at this time. It is however an attempt to explore the regional development process in a select region of the State of Arkansas. Primarily this exploratory process will be accomplished by means of comparative analysis and through the use of subjective inquiry.

In order to proceed with the task of academic inquiry a method of approach must be outlined along with the definition of terms and an explanation of the underlining generally accepted theory. Since this study is concerned with the counties surrounding the Ouachita River Project, it is implied that effects of an infrastructure project are central to the paper. Hence, at least brief discussions of the economic theory concerning economic growth and development as well as infrastructure are required. Furthermore, the selection of particular economic data to be used later in the report is also an appropriate topic. Finally, a justification for presenting a subjective, non-quantifiable narrative later in this paper is in order.

METHODOLOGY AND STRUCTURE

The area of concern of this paper is defined as those counties in the State of Arkansas which border and economically interact with the Ouachita River Project. Specifically these Arkansas counties are Ashley, Calhoun, Ouachita, and Union. Bradley county is intentionally excluded from this list even though its southwestern border is a navigable section of the Ouachita River. The reason for excluding Bradley county is two fold: (1) only a small section of its total boarder, and none of its interior, are exposed to the river, and (2) it does not have any major, or even a noteworthy minor, city on or near the river. The other four counties are all well associated with the Ouachita River Project, either by having a major portion of the river in their geographic boundaries and by sharing access to a river port. Currently, their are two Public Ports in the Arkansas section of the Ouachita River Project; the Port of Crossett in Ashley County (approximately located at river mile 250), and the Port of Camden in Ouachita County (approximately located at river mile 250). Union county has access to the river via the Crossett port and Calhoun County has access via the Camden port. These four counties constitute the primary geographic area of study for this paper and will be referred to as the ACOU counties.

In order to compare the ACOU counties with some similar geographic area, the surrounding Arkansas counties with similar geographic characteristics were chosen. These counties are defined as the BDDCC counties and are; Bradley, Clark, Cleveland Dallas and Drew counties. The ACOU and BDDCC counties are defined as the south central region of the State of Arkansas for this paper and are shown in the appendix. (See Map in Appendix.)

The quantitative analysis portion of this paper relies on a series of tables which compare various economic and demographic data series for the years 1975 to as current as possible. (i.e., Different published economic data series are complete through various years at this time.) Variables such as employment levels and unemployment rates, number of firms and total personal income as well as population data was collected from published sources. Primarily, county data is presented and aggregated into two areas (i.e., ACOU and BDDCC counties) and compared. The purpose of this approach is to document an historical comparison of these county areas during the construction of the Ouachita River Project in Arkansas. The reason for comparing historical data is based on the economic principals of growth and development, and the importance of infrastructure for initiating and maintaining conditions conducive to economic growth and development.

Although the terms economic growth and economic development are frequently interchanged, in strict economic jargon, they are not synonymous. Both are desirable as opposed to their alternatives. Economic growth is the simple increase in various economic indicators. The production of more goods, or a higher level of aggregate income, or an increase in the number of firms. Economic development on the other hand is either the increase per relevant unit or the achievement of a superior production method or the production of a better product. Economic development is more desirable, especially in later stages of the economic process. A succinct example may be illuminating at this point. If a region increased its total population at the same rate as it increased its total production level, the output per person would remain the constant. Since the portion of the economic product per person would remained fixed, the only way to increase the standard of living for one set of citizens would be to decrease the standard of living for a another group of citizens. On the other hand, if a region increased its total production level at a faster rate than its population growth rate, the portion of economic output per person would be increased. This condition of economic development is usually considered to be more desirable, all other factors remaining constant, since the average standard of living for every one in the area is capable of increasing.

Although economic development is generally considered to be more desirable than economic growth, the latter is not without its attributes. Economic growth is often a precondition for economic development. Until some "take-off" level of economic growth has been achieved within an area, their is simply to little of practically everything for modern economic development to be initiated.

In addition to its precondition for development, economic growth is also desirable from a societal point of view. The properties of social goods allows for more to be provided based on simply growth. Social goods are defined as those items or services that accommodate additional consumers at virtually no increased in costs. Roads and libraries are examples. Once a road is built, within limits, additional users can benefit from using it without limiting the benefits for those that were there before. To demonstrate how social goods would be positively effective by simply economic growth, consider the case where economic output per person remains constant through time. Furthermore, assume a constant per person tax rate. If economic growth is observed to take place in an area, and the tax rate remains constant, each resident that was there during the growth process would not experience a decrease in after tax income. However, by the very nature of economic growth, more people would be in the area, and since the tax rate is assumed to be held constant, a higher level of total tax revenues would be achieved. This increased level of tax revenues would be able to support a higher level of social goods, where their individual benefits would not decrease based on the number of users. Hence, economic growth in and of its self is desirable.

The question concerning economic growth and development theoreticians is; "How the process of either of these desirable conditions is initiated?" A rather impressive list of such writers have concluded that one of the principal ingredient of this process is investment. Furthermore, investments are subdivided into two major categories; public and private. Within the category of public investments is found the terms social overhead capital, or infrastructure. (Although their is a distention between social infrastructure and capital infrastructure, the current connotation of the term refers to the later, and will be used as such in this paper.) The essence of infrastructure is the formation of capital which would most probably not be created by the private sector because of its "public good" properties. Roads and bridges are typical examples of infrastructure, however, inland waterway projects are also included.

Great emphasis has been placed on governments responsibility to invest in infrastructure projects. The two primary reason behind this emphasis concern the (1) governments overall responsibility and (2) the delicate nature of private investments. Most people have little argument with the axiom that governments SHOULD endeavor to increase the well being of its citizens. One aspect of an individuals well being concerns their economic standard of living, which can be increased through economic growth and development. Therefore, it logically follows that governments should be concerned with matters of economic growth and development of which the formation and maintenance of infrastructures are a primary part.

However, the formation and maintenance of infrastructures are not a sufficient condition for economic growth and development. In addition to infrastructures, private initiatives, and in particular private investments, are also required. Of all economic activity, perhaps the most difficult to predict and stimulate is private investments. Because private investments is based on individual expectations concerning the future, it is extremely volatile. One method of reducing this volatility is to reduce the causes for expectations to vary. In addition to volatility, size can limit private investment. If a private investor does not have access to sufficient financial capital to establish the entire production and delivery project under consideration, the proposed project will not be developed. In this regard, the United States government has demonstrated its commitment to providing conducive conditions for private investment through its development of transportation systems. Rail, truck and water transportation systems have all been recognized as necessary and desirable public investment projects by the federal government. This line of reasoning can suggest positive action on the part of government, namely to carry through on its commitments.

Since any government has only a finite amount of resources to allocate, it must concentrate its efforts in areas where the chance of success in terms of growth and development are greatest. Two indicators of potential economic growth and development is a region's untapped natural resources and its historical record concerning economic activity. The topic of historical records can, and will, be explored in this paper by a presentation of quantifiable economic data. However, the topic of potential growth via untapped natural resources in the geographic area of concern dictates a different approach. In an attempt to at least introduce this topic, a narrative concerning two industries in the south central region of Arkansas will be presented.

HISTORICAL DATA PRESENTATION

In order to explore the recent economic history of the ACOU counties compared to the BCCDD counties, a brief numerical demonstrating that these counties are somehow similar is required. This is accomplished in Table 1 by comparing their size and populations. Notice that the two

TABLE 1

Comparison of Geographical and Population Data for ACOU, BCCDD, and the State of Arkansas

	Population 1980 Census	Area Sq. mi.	Density Acres/Pop.
Ashley County	26,538	934	22.52
Calhoun County	6,079	628	66.12
Ouachita County	30,541	737	15.44
Union County	49,988	1,053	10.00
ACOU (1)	113,146	3,352	19.20
Bradley County	13,803	654	30.32
Clark County	23,326	867	23.79
Cleveland County	7,868	599	48.72
Dallas County	10,515	688	41.88
Drew County	17,910	831	29.70
BCCDD (2)	73,422	3,639	31.72
State of Arkansas	2,286,435	52,078	14.58

(1) ACOU is Ashley, Calhoun, Ouachita and Union counties.
(2) BCCDD is Bradley, Clark, Cleveland, Dallas, and Drew counties.
Source: U.S. Department of Commerce, Bureau of Census, 1980 Census of Population Volume 1 Characteristics of the Population, Chapter 5 General Population Characteristics, Part 5, Arkansas, August 1982.

areas of comparison are approximately the same physical size, however the ACOU counties are considerable more populated. This obviously means that the population per area is higher in the ACOU counties, or as show in the Table 1 the land area per person is lower in the ACOU counties. This fact has note with respect to economic growth and development in that more labor is potentially available to sustain a drive for economic development in the ACOU counties as compared the the BCCDD counties.

Just because an area has large population does not indicate production potential. Production is a function of economic activity. There are many proxy variables for economic activity including: (1) level of employment, (2) level of unemployment, and (3) the rate of unemployment.

TABLE 2

Comparison of Unemployment Rates for
ACOU, BCCDD, and the State of Arkansas

	1975	1976	1977	1978	1979	1980	1981	1982
State	9.5	7.1	6.6	6.3	6.2	7.6	9.1	9.7
ACOU (1)	9.4	6.9	6.3	5.7	5.9	7.8	7.6	8.9
BCCDD (2)	11.7	7.5	6.8	6.7	6.3	8.6	9.6	10.8
Below State	0.14	0.16	0.35	0.61	0.28	-0.20	1.49	0.80
Below BCCDD (2)	2.31	0.60	0.54	0.93	0.43	0.76	1.92	1.88

(1) ACOU is Ashley, Calhoun, Ouachita and Union counties.
(2) BCCDD is Bradley, Clark, Cleveland, Dallas, and Drew counties.
NOTE: See Tables A, B, and C in Appendix for county data.
Source: Arkansas Employment and Security Division, Arkansas Labor Force Statistics, Annual Averages 1975-1982, August 1983.

This later variable is shown in Table 2. The eight year period depicted in this table is sufficiently long to span periodic economic downturns and thus provides a relatively unbiased comparison of the unemployment rates. Notice that the ACOU counties consistently employ a higher portion of their work force than does the BCCDD counties. Furthermore, the differences between these two series, as shown in the last row in Table 2 are usually significant. The 1.88 per cent difference between their unemployment rates in 1982 for these two county groups is noteworthy. In terms of people, this means that ACOU counties had jobs for 19,950 more workers in 1982 than did the BCCDD counties. (See Table C in the Appendix.)

Notice also that only in 1980 did the State have a lower rate of unemployment than did the ACOU counties. These unemployment figures suggest that this area is relatively well poised for economic development.

More than just an examination of employment levels and rates are required during the search for economic development potential. Another way to examine this potential is to look at the distribution of employment. Typical of this technique is to look at industry distributions as an insight into the economic activity. However, resource limitations precluded this approach. One variable which is both available and meaningful in terms of economic development is the per cent of the working population employed in the private sector. In particular, the level of interaction between the business sector and the work force is significant as in indication of the level

TABLE 3

Comparison of Total Employment and Business Employment per Total population for ACOU, BCCDD, and the State of Arkansas for the Years 1975 - 1981

Year	Percent of Total Employment per Total Population			Percent of Business Employment per Total Population (3)		
	STATE	ACOU (1)	BCCDD (2)	State	ACOU (1)	BCCDD (2)
1975	37	38	35	21	24	18
1976	39	40	38	22	25	20
1977	41	41	39	23	25	20
1978	41	42	39	25	28	21
1979	43	43	40	26	29	23
1980	44	43	41	26	28	20
1981	45	45	43	26	28	20

(1) ACOU is Ashley, Calhoun, Ouachita and Union counties.
(2) BCCDD is Bradley, Clark, Cleveland, Dallas, and Drew counties.
(3) Business Employment is all employees required to pay FICA, excluding governmental and agricultural Workers

NOTE: Percentages presented above were calculated from the data presented in Table D of the Appendix.

of private investment initiative in the area. This type of data is presented in Table 3. The most significant insight that can be gained from this table is not that the percentages for the ACOU counties are consistantly above both those for the BCCDD counties and the State of Arkansas, but that the relative differences are so large.

For the ACOU counties in 1981 of Table 3, notice that while 45 percent of the population is employed, 28 percent of the population is employed by business. This means that of those employed in the ACOU counties, 62 per cent are employed in business. The comparable figure for the BCCDD counties is 47 per cent. Or the difference between these data points is 15 per cent. From probability theory it therefore follows that business employment is dependent on the location. (Furthermore, the size of the differences suggests that a statistically significant difference exists.)

TABLE 4

Comparison of the Percent of Employed Workers Working in the Business Sector (1), for the State of Arkansas, ACOU (2), and BCCDD (3) for 1975 through 1981

	1975	1976	1977	1978	1979	1980	1981
State	57	56	56	61	60	59	58
ACOU (2)	63	63	61	67	67	65	62
BCCDD(3)	51	53	51	54	58	49	47

(1) Business Employment is all employees required to pay FICA, excluding governmental and agricultural Workers
(2) ACOU is Ashley, Calhoun, Ouachita and Union counties.
(3) BCCDD is Bradley, Clark, Cleveland, Dallas, and Drew counties.
Source: Author.

There are several different possible reasons for the per centage figures presented in Table 4, but regardless of the reasons behind these numbers, it can be said that the ACOU counties are more dependent on business employment, either as compared to their neighbors or the state as a whole. This statement is significant when considering whether or not an area is primed for economic development. Historical evidence indicates that private investors, for what ever reason, have been attracted to the ACOU counties. Since this is true, one would speculate that this trend would continue unless some major factor changed.

One additional method of measuring an areas potential for economic growth which will be presented in this section is an examination of their employee's pay levels. A higher pay scale, all other things being equal, is an indication of a higher skill levels. Higher skill levels are conducive to economic development since they mean a more qualified work force from which production activity can be sustained. Table 5 presents the average pay for employees in three different areas. Once again notice that the historical data for the ACOU counties favorably compares to both the State and to the BCCDD counties. Infact the difference between the "average wages" paid in the ACOU and the BCCDD counties is $2,252.28 per year in 1980. This is an astounding 13 per cent average difference in pay between bordering counties. When the ACOU counties are compared to the State of Arkansas, similar results are observed; a $1273.96 difference in absolute terms and a 7 per cent average difference.

The last method of analyzing historical data to be presented in this paper employes the concept of average percentage change over some time period. One of two methods can be used to arrived at this figure: (1) the geometric mean approach, or (2) the limits approach.

TABLE 4

Comparison of Personal Income per Total Employment
for ACOU, BCCDD, and the State of Arkansas
for the Years 1975 through 1981

Year	Arkansas	ACOU (1)	BCCDD (2)
1975	$ 11,280.22	$ 11,423.26	$ 10,517.65
1976	11,861.80	12,637.03	11,046.24
1977	12,641.79	13,452.00	11,630.34
1978	14,293.87	14,690.25	13,166.09
1979	15,463.02	16,104.44	14,624.47
1980	16,477.48	17,751.44	15,499.16

(1) ACOU is Ashley, Calhoun, Ouachita and Union counties.
(2) BCCDD is Bradley, Clark, Cleveland, Dallas, and Drew counties.
NOTE: Information presented in this table has been calculated from the data presented in Table D of the Appendix.

Either method will yield a figure which is the compounding factor to determine what amount the base figure must increase each year to arrive at the final figure in the series. Once the average percent change is computed for one or more time series, a quantitative description of past growth trends is determined. Toward this end, Table 6 presents such descriptive indications for six different economic variables of basically the same time series. Notice that some to the data sets used in calculating the

TABLE 6

Comparison of Average Percent Changes Over Various Time Periods for ACOU, BCCDD, and the State of Arkansas

	State of Arkansas	ACOU (1) Counties	BCCDD (2) Counties
Six Year Average Percent Change (1975-1981) in Total Employment	3.21	2.69	3.80
Six Year Average Percent Change (1975-1981) in Business Employment	3.66	2.39	1.49
Five Year Average Percent Change (1975-1980) in Personal Income	11.36	11.49	11.45
Five Year Average Percent Change (1975-1980) in Pay per Employee	7.87	9.22	8.06
Six Year Average Percent Change (1975-1981) in Number of Business Firms	1.06	0.81	0.79
Six Year Average Percent Change (1975-1981) in No. Firms with > 100 employees	4.97	3.16	0.98

(1) ACOU is Ashley, Calhoun, Ouachita and Union counties.
(2) BCCDD is Bradley, Clark, Cleveland, Dallas, and Drew counties.
NOTE: Average percent changes are calculated with the geometric mean from data in Table D of the Appendix.

Values in Table 6 had five year spans, while others covered six years periods. (i.e., 1975 through 1980, and 1975 through 1981) Of all the growth rates presented in Table 6, only the first one (i.e., six year average percent change in total employment) indicates a higher level of increase for the BCCDD counties then for the ACOU counties. On the other hand, the second row, which presents the six year average percent change in business employment is over one and a half times larger for the ACOU counties when compared to the BCCDD counties' trend. Once again, when considering economic development potential, private sector investment, and hence business employment trends, is a better indicator than is total employment trends.

Notice that in only two reported average percent changes presented in Table 6, does the ACOU counties exceed the State's comparable figure. (i.e., the third and fourth rows or, the five year average percent change in personal income, and the five year average percent change in pay per employee.) These are noteworthy exceptions in that each could be interpreted to mean a faster rate of upgrading the skill levels in the ACOU counties then the state as a whole.

NARRATIVE ANALYSIS

As mentioned in the introduction, some aspects of economic growth and development are readily subjectable to quantitative analysis. This section will attempt to bring to light some important aspects of the ACOU counties which may be significant factors for both economic growth and development that do not appear in the preceding section. Namely, a description of two industries that currently exist in the ACOU counties will be set forth. These are, the wood and stone industries. Each of these industries could be substantial users of a Inland Waterway System via the Ouachita River Project.

The south central region of Arkansas is currently heavily wooded, covered by part of the "southern pine forest". Much of this is commercially planted and regularly harvested. The products of this resource is of course wood products which if basically low value, high volume products. This description is ideally suited for transportation by the Inland Waterway System. However, the land that this forest currently grows on is also suited for many different types of agricultural crops. As the price of these other commodities increases through time, the likelihood of a shift from forested land to other crops may easily be seen. In particular, soybeans and rice are likely crops for this area, which are also low value and high volume products that must be transported.

The other regional industry that shows great promise for the future with respect to the inland waterway industry is the stone and sand & gravel industry. Because of the geological formations of the souther states surrounding the Mississippi River, few deposits of stone, sand and gravel are located below the southern Arkansas border. Most of the rock used in Louisiana, Mississippi and eastern Texas is not native. Currently, the south central region of Arkansas has a moderate sand and gravel industry exporting their product by truck. Given the roads in this area of the country, it appears that truck transportation this is about the least efficient means of moving this extremely low value, high volume (and weight) product. Now that the Ouachita River project is completed to the Port of Camden, it is only logical to expect an substantial shift in the method of transportation for this product. The very nature of stone, sand, and gravel would imply that within a short time period, a sizable quantity of these commodities goods should be transported by the waterway.

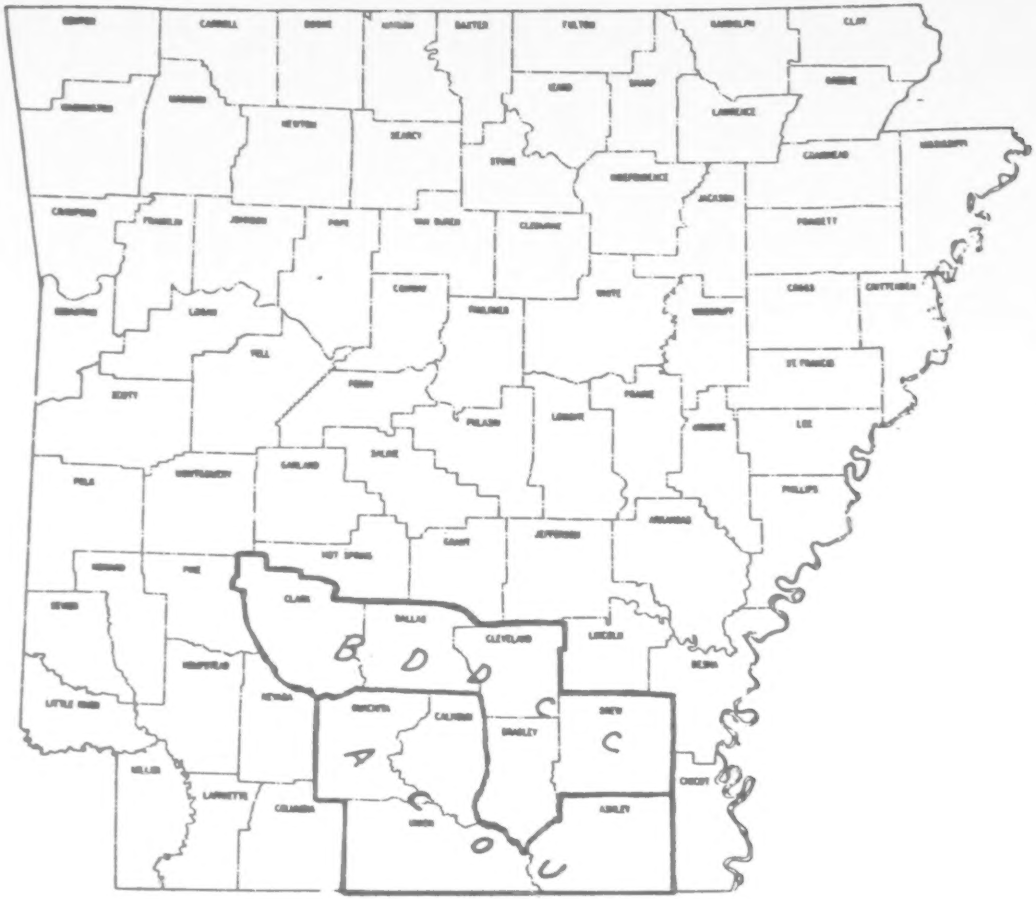
CONCLUDING REMARKS

As was stated in the introduction, this working paper is only and exploratory effort. During the course of writing it, many factors have been mentioned. However, the encompassing thought from this project is that the ACOU counties most likely are economically positioned for substantial economic development. Although no study can predict with certainty such a future event -- let alone a short working paper such as this -- development does appear to be a safe bet in this case.

Map 1

State of Arkansas

County Groups of Study Indicated


BENTON
CARROLL
BOONE
MARION
BAXTER
FULTON
RANDOLPH
CLAY
WASHINGTON
MADISON
NEWTON
SEARCY
STONE
IZARD
SHARP
LAWRENCE
GREENE
CRAIGHEAD
MISSISSIPPI
INDEPENDENCE
JACKSON
POINSETT
CRAWFORD
FRANKLIN
JOHNSON
POPE
VAN BUREN
CLEBURNE
WHITE
WOODRUFF
CROSS
CRITTENDEN
SEBASTIAN
LOGAN
CONWAY
FAULKNER
YELL
PERRY
ST FRANCIS
SCOTT
PULASKI
LONOKE
PRAIRIE
MONROE
LEE
POLK
MONTGOMERY
GARLAND
SALINE
PHILLIPS
ARKANSAS
JEFFERSON
GRANT
HOT SPRING
HOWARD
PIKE
CLARK
DALLAS
CLEVELAND
LINCOLN
DESHA
SEVIER
HEMPSTEAD
NEVADA
OUACHITA
CALHOUN
BRADLEY
DREW
LITTLE RIVER
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LAFAYETTE
COLUMBIA
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Table A

Employment Data By Counties
for the ACOU (1) Area

	1975	1976	1977	1978	1979	1980	1981	1982
Ashley County								
Employed	9975	10125	10450	10725	10375	10550	11450	10675
Unemployed	750	650	675	700	750	1150	925	1175
Unemployment Rate	7.52	6.42	6.46	6.53	7.23	10.90	8.08	11.01
Ouachita & Calhoun Counties								
Employed	13650	13925	14075	14025	14300	14450	15175	15175
Unemployed	1675	1125	1025	950	1025	1300	1650	1575
Unemployment Rate	12.27	8.08	7.28	6.77	7.17	9.00	10.87	10.38
Union County								
Employed	19375	20375	21825	21900	23200	22675	23800	23500
Unemployed	1600	1300	1200	1025	1050	1275	1275	1650
Unemployment Rate	8.26	6.38	5.50	4.68	4.53	5.62	5.36	7.02
ACOU Counties								
Employed	43000	44425	46350	46650	47875	47675	50425	49350
Unemployed	4025	3075	2900	2675	2825	3725	3850	4400
Unemployment Rate	9.36	6.92	6.26	5.73	5.90	7.81	7.64	8.92

(1) ACOU is Ashely, Calhoun, Ouachita and Union Counties.
Source: Arkansas Employment and Security Division,
Arkansas Labor Force Statistics, Annual Average
1975-1982, August 1983.

Table B

Employment Data By Counties
for the BCCDD (1) Area

	1975	1976	1977	1978	1979	1980	1981	1982
Bradley County								
Employed	4875	4950	5450	5400	5275	5325	5375	5175
Unemployed	675	475	375	325	375	450	575	675
Unemployment Rate	13.85	9.60	6.88	6.02	7.11	8.45	10.70	13.04
Clark County								
Employed	7650	9300	9625	9600	9650	10225	10450	9975
Unemployed	850	725	650	675	500	775	1050	800
% Unemployed	11.11	7.80	6.75	7.03	5.18	7.58	10.05	8.02
Clevelan County								
Employed	1850	1900	1650	1850	1925	2075	2000	1925
Unemployed	225	150	175	125	150	225	250	325
Unemployment Rate	12.16	7.89	10.61	6.76	7.79	10.84	12.50	16.88
Dallas County								
Employed	3825	4000	4150	4125	4175	4075	4125	4100
Unemployed	350	225	275	250	275	450	375	425
Unemployment Rate	9.15	5.63	6.63	6.06	6.59	11.04	9.09	10.37
Drew County								
Employed	7300	7425	7800	7925	8200	8050	9950	8225
Unemployed	875	500	475	550	550	650	800	950
Unemployment Rate	11.99	6.73	6.09	6.94	6.71	8.07	8.04	11.55
BCCDD Counties								
Employed	25500	27575	28675	28900	29225	29750	31900	29400
Unemployed	2975	2075	1950	1925	1850	2550	3050	3175
Unemployment Rate	11.67	7.52	6.80	6.66	6.33	8.57	9.56	10.80

(1) BCCDD is Bradley, Clark, Cleveland, Dallas, and Drew counties.

Source: Arkansas Employment and Security Division, Arkansas Labor Force Statistics, Annual Average 1975-1982, August 1983.

Table C

Employment Data for the State of Arkansas, ACOU and BCCDD County Areas

	1975	1976	1977	1978	1979	1980	1981	1982
ACOU Counties								
Employed	43000	44425	46350	46650	47875	47675	50425	49350
Unemployed	4025	3075	2900	2675	2825	3725	3850	4400
Unemployment Rate	9.36	6.92	6.26	5.73	5.90	7.81	7.64	8.92
BCCDD Counties								
Employed	25500	27575	28675	28900	29225	29750	31900	29400
Unemployed	2975	2075	1950	1925	1850	2550	3050	3175
Unemployment Rate	11.67	7.52	6.80	6.66	6.33	8.57	9.56	10.80
State of Arkansas								
Employed	852200	890000	938000	946000	987000	999000	1030000	1018000
Unemployed	81000	63000	62000	60000	61000	76000	94000	99000
Unemployment Rate	9.50	7.08	6.61	6.34	6.18	7.61	9.13	9.72

(1) ACOU is Ashely, Calhoun, Ouachita and Union Counties.
(2) BCCDD is Bradley, Clark, Cleveland, Dallas, and Drew Counties.

Source: Arkanses Employment and Security Division, Arkansas Labor Force Statistics, Annual Average 1975-1982, August 1983.

Table D

Economic Data for the State of Arkansas, ACOU and BCCDD County Areas

	1975	1976	1977	1978	1979	1980	1981
State of Arkansas							
Total Employment	852200	890000	938000	946000	987000	999000	1030000
Personal Income (1)	9613	10557	11858	13522	15262	16461	n/a
Business Employment (2)	473561	508347	525450	576920	599297	599540	587583
Number of Business Firms	39344	40170	41831	42198	42723	41971	41902
Number of Large Firms (3)	669	687	729	804	859	901	895
Business Employment per Firm	12.04	12.65	12.56	13.67	14.03	14.28	14.02
AOCU Counties	ies						
Total Employment	43000	44425	46350	46650	47875	47675	50425
Personal Income (1)	491.2	561.4	623.5	685.3	771	846.3	n/a
Business Employment (2)	27159	28433	28319	31714	32337	30967	31302
Number of Business Firms	2126	2121	2221	2191	2256	2216	2231
Number of Large Firms (3)	39	41	40	45	49	46	47
Business Employment per Firm	12.77	13.41	12.75	14.47	14.33	13.97	14.03
BCCDD Counties	ties						
Total Employment	25500	27575	28675	28900	29225	29750	31900
Personal Income (1)	268.2	304.6	333.5	380.5	427.4	461.1	n/a
Business Employment (2)	13320	14386	14454	15601	16717	14983	14554
Number of Business Firms	1205	1239	1328	1333	1345	1199	1263
Number of Large Firms (3)	23	21	23	23	20	18	20
Business Employment per Firm	11.05	11.61	10.88	11.70	12.43	12.50	11.52

(1) Personal income is the total amount of personal income in the area in millions of dollars.
(2) Business Employment is all employees that pay FICA tax excluding government and agructular workers.
(3) Large Firms are those business firms with more than 100 employees.
(4) ACOU is Ashely, Calhoun, Ouachita and Union Counties.
(5) BCCDD is Bradley, Clark, Cleveland, Dallas, and Drew Counties.
Sources: See Referances

Table E
Economic Data for State of Arkansas,
and the Counties in ACOU (3)

	1975	1976	1977	1978	1979	1980	1981
State of Arkansas							
Business Employment (1)	473561	508347	525450	576920	599297	599540	587583
Number of Business Firms	39344	40170	41831	42198	42723	41971	41902
Number of Large Firms (2)	669	687	729	804	859	901	895
Business Employment per Firm	12.04	12.65	12.56	13.67	14.03	14.28	14.02
Ashley County							
Business Employment (1)	6011	6394	6401	7512	7543	6635	6860
Number of Business Firms	381	384	414	413	427	414	400
Number of Large Firms (2)	9	10	9	12	12	8	10
Business Employment per Firm	15.78	16.65	15.46	18.19	17.67	16.03	17.15
Calhoun County							
Business Employment (1)	893	947	446	547	575	606	587
Number of Business Firms	70	69	75	70	78	72	74
Numger of Large Firms (2)	2	2	0	0	0	0	0
Business Employment per Firm	12.76	13.72	5.95	7.81	7.37	8.42	7.93
Ouachita County							
Business Employment (1)	7569	7669	7482	8404	8342	8196	8276
Number of Business Firms	575	575	590	596	616	600	613
Number of Large Firms (2)	10	8	10	11	12	13	11
Business Employment per Firm	13.16	13.34	12.68	14.10	13.54	13.66	13.50
Union County							
Business Employment (1)	12686	13423	13990	15251	15877	15530	15579
Number of Business Firms	1100	1093	1142	1112	1135	1130	1144
Number of Large Firms (2)	18	21	21	22	25	25	26
Business Employment per Firm	11.53	12.28	12.25	13.71	13.99	13.74	13.62
ACOU Counties							
Business Employment (1)	27159	28433	28319	31714	32337	30967	31302
Number of Business Firms	2126	2121	2221	2191	2256	2216	2231
Number of Large Firms (2)	39	41	40	45	49	46	47
Business Employment per Firm	12.77	13.41	12.75	14.47	14.33	13.97	14.03

(1) Business Employment is all employees that pay FICA tax excluding government and agructular workers.
(2) Large Firms are those business firms with more than 100 employees.
(3) ACOU is Ashely, Calhoun, Ouachita and Union Counties.
Sources: See References

Economic Data for the
Counties in BCCDD (3)

	1975	1976	1977	1978	1979	1980	1981
Bradley County							
Business Employment (1)	2617	3133	3168	3402	3457	3173	3097
Number of Business Firms	231	240	247	238	245	247	248
Number of Large Firms (2)	6	7	7	7	6	6	5
Business Employment per Firm	11.33	13.05	12.83	14.29	14.11	12.85	12.49
Clark County							
Business Employment (1)	4439	4482	4380	4886	5326	4645	4285
Number of Business Firms	408	415	464	485	484	462	450
Number of Large Firms (2)	6	4	5	6	5	4	4
Business Employment per Firm	10.88	10.80	9.44	10.07	11.00	10.05	9.52
Cleveland County							
Business Employment (2)	324	422	333	358	417	446	397
Number of Business Firms	62	60	63	61	69	66	45
Number of Large Firms (2)	0	0	0	0	0	0	0
Business Employment per Firm	5.23	7.03	5.29	5.87	6.04	6.76	8.82
Dallas County							
Business Employment (1)	2357	2433	2345	2667	2701	2346	2585
Number of Business Firms	243	252	250	252	244	245	243
Number of Large Firms (2)	5	4	4	4	3	2	4
Business Employment per Firm	9.70	9.65	9.38	10.58	11.07	9.58	10.64
Drew County							
Business Employment (1)	3583	3916	4228	4288	4816	4373	4190
Number of Business Firms	261	272	304	297	303	296	277
Number of Large Firms (2)	6	6	7	6	6	6	7
Business Employment per Firm	13.73	14.40	13.91	14.44	15.89	14.77	15.13
BCCDD Counties							
Business Employment (1)	13320	14386	14454	15601	16717	14983	14554
Number of Business Firms	1205	1239	1328	1333	1345	1316	1263
Number of Large Firms (2)	23	21	23	23	20	18	20
Business Employment per Firm	11.05	11.61	10.88	11.70	12.43	11.39	11.52

(1) Business Employment is all employees that pay FICA tax excluding government and agructular workers.
(2) Large Firms are those business firms with more than 100 employees.
(3) BCCDD is Bradley, Clark, Cleveland, Dallas and Drew counties.
Sources: See References

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1) U.S. Department of Commerce, Bureau of the Census, A Statistical Abstract Supplement, County and City Data Book 1983, 10th Ed., November 1983, passim.

2) U.S. Department of Commerce, Bureau of the Census, 1980 Census of Population Volume 1 Characteristics of the Population, Chapter B, General Population Characteristics, Part 5, Arkansas, August 1982, passim.

3) U.S. Department of Commerce, Bureau of the Census, County Business Patterns (Years 1975 through 1981) Arkansas, passim.

4) Industrial Research and Extension Center, College of Business Administration, Arkansas Personal Income Handbook, University of Arkansas at Little Rock, August 1982, passim.

5) Research and Analysis Section, Arkansas Employment Security Division, Arkansas Labor Force Statistics, Annual Averages 1975-1982, August 1983, passim.

STATEMENT OF EDWIN M. HORTON, TREASURER, OUACHITA RIVER VALLEY ASSOCIATION

My name is Edwin M. Horton. I am and have been Treasurer of the Ouachita River Valley Association for the past 18 years. The association, a not for profit corporation, organized in 1891, represents the people in Arkansas and Louisiana who are interested in the completion of the Ouachita-Black Rivers project from the Old River Cutoff in Louisiana to Camden, Arkansas.

The Congress and successive Presidents have for many years been supportive of this project which has developed navigation, recreation and flood control for thousands of residents in the two states. The project is nearing completion but lacks the necessary bend widenings and cut off improvements to enable the anticipated cost benefit ratios to be reached. The U. S. Army Corps of Engineers has studied these needs, held numerous public hearings and is ready to proceed with the completion of the total project.

We ask the Committee to consider the Corps' request so that the many years of effort may begin to show fruition in the next five years.

I respectfully ask this request be entered into the records of the Hearings on April 3, 1984.

STATEMENT OF JAMES H. PHILLIPS, EXECUTIVE DIRECTOR, ARKANSAS WATERWAYS COMMISSION

The Arkansas Waterways Commission endorses and supports the water resources development goals identified by the Ouachita River Valley Association.

The Ouachita River navigation project which brings a 9-foot channel to Camden, Arkansas, is 90% complete. The project dedication is planned for late spring. The major remaining work, bend widenings and cutoffs, needs to be completed at the earliest practical date. The reasons are: to enable the people of the basin to build the needed ports so they can begin receiving the economic return the basic project will generate and to lessen the possibility of added construction costs associated with delay.

The Commission is aware that there is a need for water projects to be revenue creators. The sooner the project is completed the sooner the Commission believes this national goal can be achieved. For this reason it is recommended that the Corps of Engineers work at maximum capability on the project and this suggests the funding for the Ouachita-Black River 9-foot channel at the Corps capability level.

The Arkansas Waterways Commission thanks the Committee for the opportunity to make this written statement.

STATEMENT OF R. EDWARD SNIDER, JR., MEMBER, OUACHITA RIVER VALLEY ASSOCIATION

My name is R. Edward Snider, Jr., and I am a member of the Ouachita River Valley Association. For several decades now, the U. S. Corp of Engineers has been very supportive of projects that help us develop our river to its potential.

We are quite pleased that the last two locks and dams on the Ouachita-Black River project will be completed this year. We are still concerned about the fact that barge transportation will not be available until appropriations for widening and bend cut offs are made. Hopefully, appropriations will be made to enable the Corp to proceed with this project as soon as possible. The economic benefits are great for our portion of the country.

We respectfully request that this statement be entered in the record of the hearing on April 3, 1984.

STATEMENT OF ROY E. LEDBETTER, EAST CAMDEN, ARK.

My name is Roy E. Ledbetter, and I am the Senior Vice President and Division Manager of HRI Resources, Inc. The Ouachita River project was authorized several scores of years ago by the Congress and is within one (1) year of completion if the U. S. Army Corps of Engineers is allowed to perform at the capability figures presented by the Corps to you.

With the completion comes flood control long needed, recreation long sought, industrial shipping for future plants in our area, and the embryo of hydro electric power.

I respectfully urge the Committee to consider and accept the capabilities of the Corps in its deliberation on the Ouachita/Black River projects, and ask that this request be entered into the records of the Hearings on April 3, 1984.

STATEMENT OF H. W. MCMILLAN, MEMBER, OUACHITA RIVER VALLEY ASSOCIATION

I am H. W. McMillan. (Post Office Box 607, Arkadelphia, Arkansas)

I have been a member of the Ouachita River Valley Association since 1934 and President from 1942 thru 1961. I have been a strong advocate of the Ouachita River Programs during that time and appeared before Congressional Committees many times over the past fifty years.

Because of the efforts of the Congress the Ouachita River Program is about to become a reality with the completion of the last two locks and dams this year.

Barge transportation with a 9 ft.channel will not become a reality until appropriations have been made for channel widening and for bend cut offs. The benefits accruing will come sooner and cheaper if the Corps work in this regard is authorized at its maximum capacity.

For this reason we in the Ouachita Valley respectfully request Congress to authorize maximum work to finish this project.

STATEMENT OF GLENN HAM, PRESIDENT-ELECT, OUACHITA RIVER VALLEY ASSOCIATION

My name is Glenn Ham, I am President Elect and a member of Ouachita River Valley Association. I wish to express my gratitude for appropriations furnished the U. S. Corps of Engineers in past years. Because of your consideration, the last two locks and dams on the Ouachita-Black River will be completed this year. Barge transportation will not be available until appropriations for widening and bend cut offs are furnished the Corps. The benefits that will be accrued by the Ouachita Basin will be sooner if capital investment is made at an earlier date. For this reason, it is recommended that the Corps work at their maximum capability on the project and this suggest the funding for the Ouachita-Black River project be at Corps capability level.

I respectfully ask this request be entered into the records of the Hearing on this date April 3, 1984.

RED RIVER VALLEY WATER RESOURCE PROJECTS

STATEMENT OF DON DUGGAN, CHAIRMAN, RED RIVER VALLEY ASSOCIATION, AND PRESIDENT, CADDO LEVEE BOARD

ACCOMPANIED BY:

- HOMER TANNER, TEXAS, VICE PRESIDENT/TREASURER, RED RIVER VALLEY ASSOCIATION BOARD OF DIRECTORS, AND MANAGER, NORTHEAST TEXAS MUNICIPAL WATER DISTRICT
- HARVEY BOLLINGER, OKLAHOMA, DIRECTOR, REDARK DEVELOPMENT AUTHORITY, RED RIVER VALLEY ASSOCIATION BOARD OF DIRECTORS
- JOHN STROUD, ARKANSAS, RED RIVER VALLEY ASSOCIATION BOARD OF DIRECTORS, RED RIVER COMMISSION
- RICHARD BENNETT, LOUISIANA, ASSISTANT CHIEF ENGINEER, LOUISIANA OFFICE OF PUBLIC WORKS
- EDGAR S. HARRIS, JR., PRESIDENT, RED RIVER VALLEY ASSOCIATION

Senator COCHRAN. Next on the agenda is Mr. Edgar S. Harris, president of the Red River Valley Association.

Mr. Harris, will you please come forward with your colleagues and associates.

Mr. HARRIS. Mr. Don Duggan is chairman of the board of directors of the Red River Valley Association and will be coordinating the witness testimony.

Senator COCHRAN. We welcome you to the committee, Mr. Duggan. We invite you to come around and bring any associates or colleagues you have with you. We hope you will introduce them and proceed as you wish.

We have copies of the statements which will all be included in the record in full. We ask you to make such summary comments from those statements as you like.

ASSOCIATION MEMBERSHIP

Mr. DUGGAN. Thank you, sir.

Mr. Chairman and members of the subcommittee, my name is Don Duggan and I am chairman of the board of the Red River Valley Association. Our association is nearly 60 years old. It represents citizens from all walks of life in the four-State area comprising Louisiana, Arkansas, Texas, and Oklahoma. These are citizens who are vitally concerned with the continued development of the water and land resources of the Red River basin.

I would like to say at this point that we are particularly pleased to have you chair this meeting, being from our sister State. You and Mr. Stennis, and certainly Senator Johnston, understand the problems, especially in recent years, of flooding that we have had.

During our presentation today, colleagues from each of the four States will address you to testify on specific needs within their own States. However, before they begin, I would like to briefly comment on three aspects of the Red River that directly impact the future physical and economic well-being of the millions of people who reside in the basin area.

RED RIVER EMERGENCY BANK PROTECTION

Each year literally thousands of acres of valuable land are destroyed as the Red River's uncontrolled flow causes massive bank erosion all along its length. We have experienced several of these in our area this year and have had to take emergency measures to correct them, in some cases to protect railroads and highways.

Not only do these cave-ins result in the loss of nonreplaceable agriculture land, but they also threaten vital flood control structures and levees which protect the valley from disastrous flooding and endanger high-cost public improvements, such as bridges, highways, railways, utilities, and pipelines. To stop this rampant destruction, it is urgent that Congress provide the funds necessary for vitally needed emergency bank protection measures.

RED RIVER CHLORIDE CONTROL PROJECT

Clean water for residential, agricultural, and industrial use is another major concern of the Red River Valley Association. More than 3,300 tons of natural salt minerals enter the Red River every day, some of these are from old oil wells and some of it just comes out of the soil. But it makes the water too saline for widespread use.

As it is right now, many communities along the river are running short of potable water and are having to develop costly plans for insuring their future water needs. For example, in our hometown of Shreveport, with a population of some 215,000 people, we are looking to spend some $60 million to construct two water storage reservoirs and the necessary pipelines to augment its current water source, in spite of the fact that the Red River runs right through the heart of our city.

RED RIVER WATERWAY, LA.

Finally, I would like to comment on the Red River navigation project. Later this year, lock and dam No. 1 is expected to be completed. While we are extremely pleased to see this, the sad note is the length of time it is taking to get the other locks and dams under construction. Based on the time frame we have already experienced, the waterway would not be navigable to the Shreveport-Bossier area until the year 2004, still 20 years away. Twenty years ago at this time we were saying in 1984 we were going to have this project, and we thought that we would.

The Red River navigation project is one of the last major waterways which can be developed. It will bring numerous benefits to the basin area in particular and the Nation in general. We submit that completion of the navigation project will provide the means for waterborne economic growth, resulting in thousands of jobs for citizens in the basin, jobs that are vitally needed today to help offset the high unemployment in many of our communities.

We continue to have a high unemployment ratio in our State. We believe that a speeded up timetable for beginning construction of the remaining three locks and dams is an economic essential in order that our area and the Nation begin recovering as soon as possible the many advantages and benefits the project will provide.

Our association fully realizes the constraints on the Federal budget, and we understand the necessity for moderation in the funding of projects where feasible. However, we urge you and the other Members of Congress to consider the adverse effects, including the continued escalation of costs and the deprivation of physical and economic benefits to the citizens and communities along the Red River, by dragging out the completion of these projects. We need to get on with this project, Senators.

I therefore urge you to consider funding these projects to the fullest so that our citizens, and the Nation, can benefit from these improvements as soon as possible.

We thank you so very much for allowing us to present these comments on behalf of the Red River Valley Association. With your permission, in just a moment we will proceed with other witnesses.

I am told that this is the last major project, waterway project, in the United States that has not been completed. During these 60 years that we worked on it, it seems to me there have been other projects that were of no more import than this one that have been completed, and we ask you to remember this when making your figures to the finance group that will determine it.

The first witness that we will hear from today is Mr. Homer Tanner. He is a vice president of the Red River Valley Association and he represents the State of Texas.

Senator STENNIS. Hold on, gentlemen. Senator Cochran has to attend to another matter. He will be back in just a few minutes and we will hear the rest of this testimony. Your next witness is whom?

Mr. DUGGAN. Mr. Homer Tanner, representing the State of Texas.

Senator Stennis. Mr. Tanner, we are glad to have you here. This is a fine project, as I see it. I am supporting it. You made a good statement, too, Mr. Duggan.

Mr. DUGGAN. Thank you, sir.

STATEMENT OF HOMER TANNER, VICE PRESIDENT FROM TEXAS, RED RIVER VALLEY ASSOCIATION

Mr. TANNER. Mr. Chairman, thank you.

My name is Homer Tanner. I speak to you as the executive committee member of the Red River Valley Association representing Texas. I am here to express our support of the Red River Waterway project. By vocation, I am the executive director of the Northeast Texas Municipal Water District, a political subdivision of the State of Texas charged with the orderly development of certain waters of the Cypress basin tributary to the Red River.

In the audience with me today to indicate their support of the association requests are people representing varied interests in agriculture, industry, business, and water professionals from the public sector that have a common interest in the river. Many have submitted written testimony for this record. We ask that the submittals be made a part of the record.

The association has provided an in-depth, comprehensive overview of the requested budget figures with supporting data that have been previously approved by the membership for presentation here today. I will only synopsize here some major Texas interests.

I want to share with you our concerns for total funding of basinwide projects in each State from the headwaters of the Red River to its juncture at Old River and the Mississippi. Each and every major and however minor segment will ultimately play a significant part in the overall total development of the river.

Your special attention to the written testimony presented by the State of Texas, Department of Water Resources, is urged. The department outlines clearly and concisely, in less than seven pages, the projects we appear here today to support.

On February 9 of this year you were provided funding levels by Lt. Gen. J. K. Bratton, Chief of Engineers, as perceived to be fiscally attainable. Also you heard a broad-ranging discussion on budget constraints, methods of funding, and new cost-sharing techniques currently being developed by the administration from Assistant Secretary William R. Gianelli, with particular emphasis on future cost-sharing.

Unfortunately, the vitally important program of chloride control abatement projects in Texas and Oklahoma has been caught in that web. This is not the forum to resolve the dispute, but I do wish to keep you advised that as soon as the impasse is resolved, we will be again asking for funding. The salt must be removed from the river, and I emphasize "must," for the benefit of the entire river. A concise analysis of the much discussed Red River chloride project is contained in the State report.

Long-range planning for future utilization of the waters flowing along the Texas-Oklahoma borders is currently underway by several regional entitites. M&I usage appears to be ever more feasible at this moment.

LAKE WICHITA, HOLIDAY CREEK, TEX.

The Lake Wichita, Holiday Creek flood control project falls within the scope of the administration's guidelines for funding. The city of Wichita Falls has agreed to fund the non-Federal share of the project, expressing a positive attitude and a readiness to see the project to its completion. We ask your approval of project funding.

From its headwaters in western Oklahoma and Texas the river meanders in a southeasterly direction, its Oklahoma and Texas tributaries adding to its content in an erratic fashion, causing wide fluctuations in river flows and levels. Exceptionally high density rainfalls in normally dry southwest Oklahoma recently contributed to high and rapid flows throughout the river's course through Oklahoma, Texas, Arkansas, and into Louisiana. The river graphically displayed its destructive capabilities. Attendant with the flooding was the loss of irreplaceable prime agricultural lands through bank caving and loss of structural improvements, such as roads and bridges, to include some river control structures.

These disastrous losses can be stopped by a systematic program of bank stabilization. Progressive construction of such a program is absolutely essential to the safety, growth, and well-being of the Red River valley. To further delay this vitally needed protection would be shortsighted.

The States of Arkansas, Oklahoma, and Texas have agreed to cost-sharing requirements on that segment of the river entitled, "Red River Below the Denison Dam." This phase of the project is becoming more critical with passage of time for the entire stretch of the river above Shreveport.

COOPER LAKE AND CHANNELS, TEXAS

Cooper Lake and channels is a project that has become caught up in litigation for the past several years, and that impasse also appears nearing solution. While there are not funding requests in the current budget, we wish to keep you informed of the extreme importance of the project as a major municipal water supply in an area that will be reaching shortage conditions in the near term. We will, hopefully, be asking your consideration for funding to complete the project in our next appearance before you. Again, I ask your indulgence to review the State testimony.

The Little Cypress Creek request is for completion of the ongoing project study to determine flood control, water conservation and other water-related purposes. We trust it merits your final approval.

The navigation feature of the waterway project will be addressed by my associates from Louisiana, and I wish only to point out we in Texas have long been supportive of the project. However, permit me to address a feature of the project that needs attention.

In 1967, the Chief of Engineers determined a segment of the river, now entitled, "Shreveport to Daingerfield Reach," should be reviewed prior to construction. The current Lower Mississippi Valley Division funding capabilities report states planning will continue with available funds. We are requesting the specific amount of $100,000 be authorized by this committee to ensure an adequate level of study as completion of the lock and dam construction phase continues upstream.

Permit me to conclude by saying 1984 marks my 30th year to provide input into projects designed to enhance our Nation's waters. I was first asked in 1954 to prepare some economic data along the Arkansas River above Keystone Dam in Oklahoma in support of a dream. That one is completed. Now let's complete this one.

Thank you for listening to me.

Senator COCHRAN. Thank you very much, Mr. Tanner.

Now we will hear from Mr. Harvey Bollinger, director of the RedArk Development Authority in McAlester, Okla.

OKLAHOMA PROJECTS

STATEMENT OF HARVEY BOLLINGER, DIRECTOR, RED RIVER VALLEY ASSOCIATION

Mr. BOLLINGER. Mr. Chairman and other distinguished members of the committee, it is indeed an honor and a privilege to appear before this committee today to discuss our Nation's most vital resource—water. However, I appear before this committee as a substitute for Mr. Ed Edinger, who is the Oklahoma vice president of the Red River Valley Association. Mr. Edinger has been appearing before this committee for almost 30 years to represent Oklahoma and the Red River Valley Association. It is only as a result of a medical illness that keeps him away this year.

I would like to spend just a couple minutes emphasizing two very imporant areas of concern to Oklahoma and the entire association.

HYDROELECTRIC POLICY AND DEVELOPMENT

The first of these deals with our Nation's energy situation. At this time in our Nation's history when we have such a critical energy situation, it is imperative that we seek to develop all feasible sources of energy production. Hydropower development plays a critical role in our country's energy production.

I want to go on record as being in strong opposition to the administration's proposed cost-sharing policies with regard to hydropower development. This policy, being implemented without approval of Congress by the administration through the Bureau and the Corps, will result in a complete shutdown of future hydroelectric development of Federal projects. At a time when our Nation is having serious second thoughts about nuclear power and many nuclear projects are being shelved, we can ill-afford to have a second vital source of energy—hydropower—also shelved.

I would like to draw your attention to projects currently underway by the Corps of Engineers— Hugo Lake and Pine Creek Lake. The Corps has recently completed reconnaissance level reports which show a benefit-cost ratio at Hugo of 1.4 to 1 for an additional 15-megawatt hydropower plant. The Pine Creek Lake has a cost-benefit ratio of 1.8 to 1 for up to a 40-megawatt hydropower plant. I would strongly recommend this committee provide funds for the Corps of Engineers equivalent to their full capabilities to continue at the feasibility study level at 100-percent Federal cost for the studies of these two sites. I understand the Corps capability is $200,000 at Hugo and $115,000 at Pine Creek.

LUKFATA LAKE, OKLA.

The third project is Lukfata, a proposed lake in southeastern Oklahoma. A similar Corps reconnaissance study has showed a 2-to-1 benefit-cost ratio for up to a 65-megawatt hydropower plant at this particular site. Again I would request in fiscal year 1985 that full capability at 100-percent Federal funds be provided to move this study along. I understand that figure to be $200,000.

RED RIVER CHLORIDE CONTROL PROJECT, OKLAHOMA AND TEXAS

The second area which I would like to mention is the Red River basin chloride control program. The two previous speakers before me have also mentioned this particular project. I think that should emphasize to this committee the importance of this project not only to one State, Oklahoma, but to the entire valley area. I think that makes it also a vitally important project from the national standpoint.

The Red River is 1,200 miles long. It drains about 94,000 square miles, or just over 2.5 percent of the Nation. The Red River is a significant water resource, not only to the four States represented by this association but to the Nation.

However, this significant national water resource is heavily polluted. There are 10 natural salt pollution areas identified within the extreme upper part of the Red River basin. These salt sources contribute approximately 3,600 tons of dissolved salt a day into Lake Texoma, a major lake on the main stem of the Red River. Just last summer, while visiting the largest single contributor of the 10 sites, and the only identified source in Oklahoma—the other 9 are in the Texas Panhandle—we tested the brine being emitted from one of the springs at this site and it was 98-percent concentrated salt. In other words, you can stick your finger in that brine, pull it out, and when the air hits it you have salt crystals. That is a lot of salt and a lot going into a major resource.

The problem is big, and the Corps has been doing quite a bit of work in the area. In fact, passage of the 1976 and 1970 Flood Control Acts authorized construction of measures to control the natural salt sources at eight of these areas within the basin.

However, there was a provision put on this authorization for construction, that the construction was not to be started until approved by the Secretary of the Army. Approval of the Red River chloride control report, submitted to the Secretary of the Army in August 1977, was deferred pending an economic reanalysis to be conducted at his request.

The economic feasibility was submitted to the Secretary for final action in January 1981. The Secretary has approved the report. In fact, he has issued statements indicating that his office considers this project to be and this economic analysis to be one of the best conducted by the Corps of Engineers in the Nation. This report indicates that the project has a benefit-cost ratio of 1.7 to 1.

Although all reports submitted and accepted by the Secretary show the project to be technically, environmentally, and economically feasible, the Secretary has refused to forward the report to Congress for appropriations. The issue delaying clearance of this construction start is the matter of cost-sharing. The Secretary is holding this project hostage while seeking to coerce the local sponsors into an agreement of a cost-sharing arrangement as proposed by the administration.

In reviewing the record, it is obvious that it was the intent of the authorizing legislation that removal of the natural pollutant be a 100-percent Federal responsibility. Agreements made in 1966 by the local sponsors and the Federal Government established the cost-sharing policy on this project. That policy was that the local sponsors would have the responsibility of removing about one-third of the pollution that goes into the river coming from manmade sources and that the Federal Government would have the responsibility of removing the 3,600 tons of natural pollution that flows into the river.

It should be clear that if there ever was a project which was of vital interest to the Nation, one that involves a major natural resource, it would be this project.

Both the States of Texas and Oklahoma have expended major sums of money to control the manmade pollution. We fully believe that the non-Federal role is being achieved and will continue to be strengthened. However, the cooperative project goal to make the basin water suitable for beneficial use cannot be obtained unless the Federal Government honors its long-standing commitment and discharges its responsibility.

Therefore, we strongly request that this committee appropriate funds during fiscal year 1985 in the amount of $2 million to initiate construction on area VI and area X. This precedent has been set by area VIII which was authorized and initiated beyond and without the Secretary's approval earlier and is almost complete. So there has been a precedent set for the initiation of these toxic projects without the completion of the entire project. We would really urge you consider this action in fiscal year 1985.

Again I want to thank you for this opportunity to appear before the committee and discuss these two vital issues.

Senator COCHRAN. Thank you very much for your excellent statement.

[The statement follows:]

STATEMENT OF HARVEY BOLLINGER, EXECUTIVE DIRECTOR, REDARK DEVELOPMENT AUTHORITY

OKLAHOMA TESTIMONY

My name is Harvey Bollinger. I am executive director of RedArk Development Authority. RedArk Development Authority is a public trust organized through the State of Oklahoma for the purpose of achieving maximun development of the water and natural resources of 21 counties within the state. Mr. Chairman, it is indeed an honor and a priviledge to appear before this committee today to discuss our nation's most vital resource, water. However, I appear before this committee as a substitute for Mr. Ed Edinger, who is the Oklahoma Vice President of the Red River Valley Association. Mr. Edinger has been appearing before this committee for almost 30 years to represent Oklahoma and the Red River Valley Association. It is only as a result of a medical illness that keeps him away this year.

As a part of our written testimony there are several resolutions regarding projects of vital interest to Oklahoma. I will not attempt to repeat or even to mention all of these projects. I would like to spend just a couple of minutes emphasizing two very important areas of concern to Oklahoma and the entire Association.

The first of these deals with our Nation's energy situation. At this time in our Nation's history when we have such a crucial energy situation it is imperative that we seek to develop all feasible sources of energy production. Hydropower development plays a critical role in our country's energy production.

First, I want to go on record as being in strong opposition to the Administrations proposed cost-sharing policies with regard to hydropower development. This policy being implemented without approval of Congress by the Administration through the Bureau and Corps of Engineers will result in a complete shut-down of future hydroelectric development of Federal projects. At a time when our nation is having serious second thoughts about nuclear power and many nuclear projects are being shelved, we can ill-afford to have a second vital source of energy, hydropower, also shelved.

With this in mind, I would like to draw your attention to three projects currently under way by the Corps of Engineers in Oklahoma. The first is Hugo Lake, Kiamichi River, Oklahoma. The Corps has completed a report in October of 1982 which showed a benefit cost ratio of 1.4 to 1.0 for up to a 15 megawatt hydropower plant. I would strongly recommend that this committee provide funds to the Corps of Engineers equivalent to their full capability (I understand this to be $200,000) to continue this study at 100% Federal cost.

The second project is Pine Creek Lake, Pine Creek, Oklahoma. The Corps has also completed a report in October, 1982, on this project showing a cost benefit ratio of 1.8 to 1.0 for up to a 40 megawatt hydropower plant. Again, I would strongly recommend that the Corps of Engineers receive funds from this Committee equivalent to their full capability (I understand this to be $115,000) to continue this study at 100% Federal cost.

The third study is Lukfata Project, Oklahoma. A preliminary study submitted in May, 1983, showed potential for up to a 65 megawatt hydropower plant that could be developed as a part of this project with a 2.0 to 1.0 BCR. This is a proposed project where the previous two projects, Hugo and Pine Creek, are existing dams. Again, I would strongly recommend that the Corps receive funds in FY85 equivalent to their full capability (I understand to be $200,000) to continue this study at 100% Federal cost.

The second area which I would like to mention is the Red River Basin Chloride Control Program. The Red River is 1,200 miles long. It flows out ot the Texas panhandle, forms a border between Texas and Oklahoma, then flows through southwestern Arkansas into Louisiana where it empties into the Mississippi River. The Red River Basin drains an area of nearly 94,000 square miles or just over 2.5% of the land area of the United States. The Red River is a significant water resource, not only to the four states represented by this association, but to the nation. However, this significant national water resource is heavily polluted, making it unusable for municipal and industrial water supplies and for irrigation water throughout the basin. There are ten natural salt pollution areas identified within the extreme upper part of the Red River basin. These salt sources contribute approximately 3,600 tons of dissolved salt a day into the Red River, all of which enters Lake Texoma, the only mainstem lake on the Red River. These ten salt sources produce plain old-fashioned table salt. In fact, just this past summer, while visiting the largest single contributor of the ten sites, and the only identified source in Oklahoma (the others are in the Texas panhandle) we tested the salt brine be emitted from one of the springs and it was 98% concentrated. That means that you can stick your finger into it, pull it out, and when the air hits it, you have salt crystals. Yet, the water is crystal clear.

The Corps of Engineers has been involved in studying solutions to controlling these ten salt sources for many years and I will not go into this long history. However, I will mention certain key events. Passage of the 1966 and 1970 Flood Control Acts (P.L. 89-789 and P.L. 91-611) authorized construction of measures to control the natural salt source from eight of these areas in the basin. However, there was a provision put on this authorization for construction, that the construction on the project could not be started until approved by the Secretary of the Army. Approval of the Red River Chloride Control Report submitted to the Secretary Army in August of 77 was deferred pending an economic reanalysis to be conducted at his request. The economic reanalysis which reaffirmed the economic feasibility was submitted to the Secretary Army for final action in January, 1981. The Secretary has approved the report. In fact, his issued statements indicate that his office considers this to be one of the best economic analysis reports ever performed by the Corps of Engineers. This report indicated the project has a benefit to cost ratio of 1.7 to 1.0. Although all reports submitted and accepted by the Secretary show the project to be technically, environmentally, and economically feasible, the Secretary refused to forward the report on to Congress for appropriations. The issue delaying clearance for the construction start is the matter of cost-sharing. The Secretary is holding this project hostage while seeking to coerce local sponsors into an agreed cost-sharing arrangement as proposed by the Administration. This project was authorized by Congress for construction. The Secretary's discretion was with regard to the question of technical environmental and economic feasibility. All of these have been shown to be positive and are accepted by the Secretary. In reviewing the record, it is obvious that it was the intent of the authorizing legislation that removal of the natural pollution is a 100% Federal responsibility. Agreements made in 1966 by the local sponsor and the Federal government established a cost-sharing policy. That policy was that the local sponsors, the states, would have the responsibility for removing the man-made pollution (about 1/3 of the salt brine entering the river) and that the removal of the 3,600 tons of natural pollution would be the responsibility of the Federal government. It should be clear that if there ever was a project which was of vital interest to the nation, one that involves a major natural resource, it would be this project. Both the states of Texas and Oklahoma have expended major sums of money to control the man-made pollution. We fully believe the non-federal role is being achieved and will continue to be strengthened. However, the cooperative project goal to make the basin water suitable for beneficial use cannot be attained unless the federal government honors its long-standing committment and discharges its responsibility. Therefore, we strongly request that this committee appropriate funds during FY85 in the amount of $2.0 millionto initiate construction on Areas VI and X in FY85. Both the Senate and House Omnibus Water Bills currently being considered include language which will remove this discretionary authority given to the Secretary of the Army.

Again, I want to thank you for this opportunity to appear before your committee and discuss these two vital areas.

STATEMENT OF JOHN STROUD

Senator COCHRAN. We will now hear from John Stroud, who is a member of the Red River Valley Commission from Arkansas.

Mr. STROUD. That is Texarkana, Tex. [Laughter.] That was a misprint.

Senator COCHRAN. That is a horrible misprint.

Mr. STROUD. Mr. Chairman, rather than repeat the concerns, I would like to just point out to you two construction projects and two planning projects on the Red River concerning bank stabilization.

RED RIVER EROSION AND FLOOD CONTROL PROJECTS

As you pointed out, Mr. Chairman, we had $18 million in losses last year from flooding. And as Senator Pryor and the other witnesses have pointed out, we are having massive losses of valuable farmland.

The two projects that are now available for stabilizing the banks are the Red River emergency bank protection and the Red River levees and bank stabilization below Denison Dam. We earnestly ask your consideration of an appropriation of $12 million for the emergency bank protection measures. There are projects in place, two in Louisiana and three in Arkansas, that will provide much-needed stabilization at these critical points in the river.

At the Red River below Denison Dam a similar situation is true. There are two projects in Louisiana and four in Arkansas. I will not repeat the names—Senator Pryor in his statement named all of them—under both programs. But we vitally need this work.

As you know, projects on the Red River below Denison Dam are for stabilization in places where it is not economically feasible to keep moving the levee back, but to put a halt once and for all to the bank caving in in those locations.

There are two planning projects, one mentioned by Senator Pryor, the Red River Waterways, Shreveport to Index project. Of course, that is the comprehensive bank stabilization program that we look forward to in, hopefully, 4 years or so. We are asking for $520,000 to continue the planning.

I might add we have been working for approximately 10 years in Arkansas gathering the non-Federal costs. We don't have a feasible tax base to support this. We have what we call a Red River Waterways trust fund of over $3 million that has come from cities and counties that are very broke, but they still have contributed, and from the appropriations of the Arkansas General Assembly. We want to be ready to proceed to construction when that planning is completed.

Mr. Chairman, the other planning project is one I know you are interested in. It is to begin planning from Index to Denison Dam. We don't think it is premature. Planning was conducted for 1 year. It started 2 years ago. Last year it was not part of the appropriations bill. We think it important that this river be stabilized above Index, above the levee system. We hope you can see fit to reinstate the planning because it is a long time from the beginning of planning to construction.

We are dedicated to stabilizing this river, and when navigation gets to Shreveport, we ask you to help us move it upstream. I know Senator Johnston has pledged his support of that. We likewise fully support the testimony of the State of Louisiana for full funding of the Red River navigation project, especially lock and dam No. 2, and, hopefully, starting lock and dam No. 3.

Thank you. I appreciate the opportunity to talk to you.

Senator COCHRAN. Thank you for your very helpful description of the need there, Mr. Stroud. I appreciate it.

[The statement follows:]

STATEMENT OF JOHN F. STROUD, JR., ON BEHALF OF THE RED RIVER COMMISSION OF ARKANSAS

Red River Waterway, Shreveport, La., to Index, Ark., for continuation of preconstruction planning: President's budget request for fiscal year 1985, none; our request	$520,000
Red River emergency bank protection (Louisiana, Oklahoma, Arkansas, and Texas): President's budget request for fiscal year 1985, none; our request	12,000,000
Red River levees and bank stabilization below Denison Dam (Texas, Arkansas, and Louisiana): President's budget request for fiscal year 1985, none; our request	13,000,000
Red River bank stabilization, Index, Ark., to Denison Dam (Arkansas, Oklahoma, and Texas) for resumption of preconstruction planning: President's budget request for fiscal year 1985, none; our request	350,000
Red River below Denison Dam, comprehensive basin study (Arkansas, Louisiana, Oklahoma, and Texas) for construction of planning: President's budget request for fiscal year 1985, none; our request	335,000
Red River Waterway, Mississippi River to Shreveport, La., to continue construction: President's budget request for fiscal year 1985, $81,600,000; our request	105,900,000

GENERAL STATEMENT

On behalf of the Red River Commission of Arkansas, as its attorney, I wish to thank the members of this committee for the opportunity to again express the concerns, needs, and priorities of funding from the Congress to continue the orderly development of the Red River Valley in southwest Arkansas.

Seventeen years ago, the bank caving in southwest Arkansas accelerated to such an extent that the levee boards in that area banned together to form an association to present testimony to the Congress with a united voice. At that time, some of the upstream dams in Arkansas and Oklahoma had been completed which greatly alleviated the threat of floods, but which rapidly accelerate the bank caving due to the river remaining at one-half to two-thirds bank full for long periods of time. Since that time, upstream dams known as Millwood, Gillham, Dierks, and De Queen have been completed which have further reduced the threat of flooding, but which have accelerated the bank caving even more.

The State of Arkansas became concerned at this rapid irreparable loss of its most fertile farmland in southwest Arkansas and 11 years ago created the Red River Commission. The commission was vested with the authority to furnish the local cooperation necessary for the construction and study of projects and to coordinate with the Corps of Engineers and the Congress to develop the water resources of the Red River in Arkansas. Southwest Arkansas is fortunate to have an abundance of water, rich soil, and timber resources, but we vitally need the assistance of Congress to continue the bank stabilization projects for the preservation of these natural resources.

RED RIVER WATERWAY PROJECT, SHREVEPORT, LA., TO INDEX, ARK.

The Congress has funded preconstruction planning for this comprehensive bank stabilization program for 6 years for the reach of the river from Shreveport, La., upstream to the Arkansas, Texas boundary at Index, Ark. Although much-needed stabilization work in certain areas has been performed with funding by the emergency bank protection and Red River below Denison Dam projects, only through the completion of preconstruction planning and then construction of this comprehensive bank stabilization program can the loss of valuable farmland be brought to a conclusion. The Corps of Engineers has estimated that over 1,000 acres of farmland is lost each year in this reach of the river due to bank caving.

Tens of thousands of dollars have been contributed by the four counties bordering the Red River in Arkansas and by the towns and communities within those counties and millions of dollars have been placed in the Red River Waterway trust fund by the Arkansas General Assembly to meet the non-Federal costs of the construction of this project. The Red River Commission is continuing full speed ahead in its efforts to have the non-Federal costs in hand when the preconstruction planning is completed so that construction can begin in an orderly manner without great delay. Dependent upon the level of funding by the Congress, approximately 3 or 4 years of continued preconstruction planning will be required before the Corps of Engineers will be in a position to proceed to the construction phase.

Not only will this project end the loss of some of the Nation's most valuable resources, which this country can ill-afford to waste, but substantial benefit will accrue to the navigational project downstream which is presently under construction. The farmland is now washed downstream only to form worthless sandbars and place tremendous amounts of silt in the channel, both to the detriment of navigation. We, therefore, request an appropriation of $520,000 during fiscal year 1985 to continue preconstruction planning of this comprehensive bank stabilization program.

RED RIVER EMERGENCY BANK PROTECTION (LOUISIANA, OKLAHOMA, ARKANSAS, AND TEXAS) AND RED RIVER LEVEES AND BANK STABILIZATION BELOW DENISON DAM (TEXAS, ARKANSAS, AND LOUISIANA)

It is imperative that these two programs continue to be funded to provide bank stabilization works in those portions of the river where the caving is most critical and where public facilities such as highways, pipelines, and bridges are in danger of destruction and to provide stabilization where that protection is cheaper than continued periodic levee setbacks.

Approximately 3 years ago, the first cutoff performed on the Red River in Arkansas was completed at a point known as Mays Lake cutoff. The Corps of Engineers expects to let a contract for the second cutoff next month at an area known as Goose Lake cutoff which will eliminate a double bend in the river. Funding of the emergency bank protection and Red River levees and bank stabilization below Denison Dam projects will continue to allow these vital improvements to be accomplished in the areas most critical during the several years of planning still required before a comprehensive bank stabilization program can begin to be constructed. In the summer of 1982, the Red River broke through a narrow strip of land between it and Little River where a water treatment facility is located for the treatment and transmission of pure drinking water to the city of Hope, Ark. Repairs are in the process of completion of that breakthrough, but certainly preventive bank stabilization works could have been accomplished at a fraction of the cost of those repairs. This is but one example of the necessity for continued funding of these programs to avoid substantially larger expenses which will result from delay of funding.

We urge your recommendation of the funding of the emergency bank protection program for fiscal year 1985 in the amount of $12 million and of the Red River levees and bank stabilization below Denison Dam program in the amount of $13 million for fiscal year 1985.

RED RIVER BANK STABILIZATION, INDEX, ARK., TO DENISON DAM

Bank caving is not only a serious problem between Shreveport, La., and Index, Ark., but it continues upstream between Index, Ark., and Denison Dam. The Congress saw fit to initiate preconstruction planning for a comprehensive bank stabilization project in that reach of the river during fiscal year 1983, but it was not funded for continued study during fiscal year 1984. We join with our sister States of Texas and Oklahoma in urging the reinstatement of this preconstruction planning project recognizing that many years of planning are required before construction of this type project can begin. We hope that an orderly development up Red River can continue in the years ahead for the benefit of the peoples of all four States bordering the Red River. We, therefore, urge you to appropriate the sum of $350,000 to resume this preconstruction planning program during fiscal year 1985.

RED RIVER BELOW DENISON DAM, COMPREHENSIVE BASIN STUDY

We think the administration displayed sound judgment when it included initial funding for a comprehensive study of the entire Red River basin during fiscal year 1984 to include flood control, water supply development, generation of hydroelectric power, development and enhancement of recreational potentials, and improvement of the river for navigation and port-site development. The study of hydroelectric power in conjunction with navigation on the Red River will undoubtedly prove of economic benefit if timely studied. We, therefore, urge an appropriation to continue this comprehensive study in the amount of $335,000 for fiscal year 1985.

RED RIVER WATERWAY, MISSISSIPPI RIVER TO SHREVEPORT, LA.

It is a pleasure for the Red River Commission of Arkansas to join with the State of Louisiana to seek continued funding of the construction and completion of lock and dam No. 2 and initiation of site work for lock and dam No. 3. We are well aware of the economic impact that will occur not only to Louisiana, but certainly to southwest Arkansas when the navigable channel reaches the port of Shreveport. We, therefore, urge your consideration of an appropriation in the amount of $105.9 million for fiscal year 1985 to continue the construction of this vital project.

RED RIVER BASIN PROJECTS IN LOUISIANA

STATEMENT OF RICHARD BENNETT, LOUISIANA STATE OFFICE OF PUBLIC WORKS

Senator COCHRAN. Mr. Richard Bennett is here, assistant chief engineer, Office of Public works, State of Louisiana, as a member of the panel.

Mr. BENNETT. Mr. Chairman, Senator Johnston, this statement is being given on behalf of the Office of Public Works of the Louisiana Department of Transportation and Development.

I am especially concerned about the projects on the Red River with reference to a trend in funding that is developing. There are several authorized projects for improvements on the Red River in Louisiana. The three major ones are Red River levees and bank stabilization below Denison Dam, the Red River emergency bank protection, and the Red River Waterway project.

Included in our group here today are members of the Red River Waterway Commission, several levee boards, representatives of the municipalities, and local governing bodies, along with other representatives of the State government in Louisiana, all of whom have traveled a long way, contributing their time and money to indicate their support for the recommendations and requests that we will make to you and to indicate their interest in these vital water resources projects.

RED RIVER BANK PROTECTION AND STABILIZATION PROJECTS

In recent years, funding of the Red River emergency bank protection and Red River levees and bank stabilization below Denison Dam has been systematically reduced. This has been done in participation with the Red River Waterway project, which would accomplish some, but not all, of the same objectives.

We testified in this regard last year and the year before. Again we urge that this dangerous trend be halted and reversed or there may be no effective programs for controlling the Red River.

The Red River Waterway project, a navigation project, cannot be relied on for solving flood control objectives. The Red River levee and bank stabilization below Denison Dam project is the only comprehensive flood control program on the Red River, containing authorization for construction of a variety of flood control measures, and for which there is no existing substitute.

This authorization provides for construction of the first lines of defense against flooding for the Red River Valley and its citizens. There is no money in the President's proposed budget for Red River levees and bank stabilization below Denison Dam. We are asking that the sum of $13 million be appropriated for this project in fiscal year 1985.

There are a number of locations on the river where work is needed that will justify this figure, which have already been mentioned by Senator Pryor in his earlier statement and alluded to by the witnesses.

The Red River emergency bank protection authorization exists for the purpose of constructing bank stabilization work as early as possible in the most critical locations on the Red River instead of waiting several years and losing many millions of dollars in damages. Thousands of acres of productive land will be protected and a desirable alignment of the Red River will be preserved if this project receives funding. Otherwise, far greater expenditures will be required in the future to accomplish the same end.

We are requesting that $12 million be appropriated for this project in fiscal year 1985. Again, a list of locations needing work was mentioned earlier by Senator Pryor and others.

To abandon these two projects, with the thought that the Red River Waterway project alone satisfies their objectives, is inconsistent with the project purposes. We ask that you reverse this frightening trend.

RED RIVER WATERWAY, LA.

I would like now to address the Red River Waterway project. The Red River Waterway Commission of Louisiana has spent more than $13 million for the purchase of approximately 19,000 acres of rights-of-way and other local participation requirements since the project began. For the past few years, the Commission has spent approximately $2.5 million per year in this pursuit. During the lull in construction which occurred a few years ago, private businesses, port authorities, and others have spent significant amounts of money toward development in the

Red River Valley in expectation of the day when the return of commercial navigation will be a fact on the Red River.

The funding included in the administration's proposed budget for this project is, therefore, very much appreciated, although less than we need, the anxiety we have felt as a result of a lack of adequate funding in previous years is somewhat lessened.

Right-of-way acquisition by the Commission is well ahead of construction proposed by the administration. Appropriation of an additional $25.85 million over and above the President's proposed budget will allow the utilization of rights-of-way already acquired by the commission. These lands now lie idle due to inadequate construction funds.

The Red River Valley in Louisiana is one of the Nation's economically depressed areas where unemployment is well above the national average. Additional funding we are requesting beyond the administration's proposed budget will stimulate the economy in the valley, provide many needed jobs, and contribute to continuation of the national economic recovery.

The State of Louisiana supports the goal of the administration and the Congress of reducing deficits and balancing the national budget. Our request, we believe, is compatible with the administration's economic goals. This project has borne for the past several years an excessive share of budget cuts compared to other programs and water resource projects in other areas. The additional funding we request, if granted, will be another step toward restoring equity in this program.

Mr. Chairman, you mentioned earlier that the Corps of Engineers had been given some encouragement to proceed in certain directions on other projects. Because of its critical effect on the accomplishment of the remaining work on the waterway, we also request that the committee include in the bill language which would give the Corps similar encouragement to proceed with the initial construction on lock and dam No. 3 in the upcoming fiscal year.

There are a number of other projects in the Red River basin for which funds are requested in the coming fiscal year. These projects and needs are addressed in our detailed statement, which has been filed for the record. We solicit your favorable consideration of these requests.

We also wish to be recorded in support of the basinwide request made by the Red River Valley Association and the representatives of our sister States in the basin testifying here today.

Thank you for this opportunity to appear before you and express our views.

Senator COCHRAN. Thank you very much, Mr. Bennett.

[The statement follows:]

STATEMENT OF RICHARD L. BENNETT, ASSISTANT CHIEF PLANNER, OFFICE OF PUBLIC WORKS, LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

The Louisiana Department of Transportation and Development, Office of Public Works, is the agency designated to represent the State of Louisiana for the coordinated planning and development of water resources including flood control, navigation, drainage, water conservation, and irrigation projects. Therefore, this statement is presented on behalf of the State of Louisiana. We are pleased to present the following endorsements and recommendations for fiscal year 1985 appropriations for Louisiana projects in the Red River basin.

RECOMMENDED APPROPRIATIONS FOR RED RIVER BASIN PROJECTS—FISCAL YEAR 1985

Louisiana projects	Budget allowance	Louisiana request
Construction:		
Bayou Bodcau and tributaries	$300,000	$300,000
Red River emergency bank protection	3,254,000	12,000,000
Red River levees and bank stabilization below Denison Dam		13,000,000
Red River Waterway, Mississippi River to Shreveport	80,100,000	105,950,000
Planning: Red River Waterway, Shreveport, La. to vicinity of Index, Ark		520,000
Studies:		
Aloha-Rigolette area		500,000
Red River below Denison Dam, comprehensive basin study	335,000	335,000

Operation and maintenance	Estimated obligation	Louisiana request
Bayou Bodcau Reservoir	$580,000	$580,000
Caddo Lake	177,000	177,000
Red River Waterway, Mississippi River to Shreveport	1,614,000	1,614,000
Wallace Lake	155,000	155,000

NOTE: The projects listed above are only those in Louisiana and directly affecting the State. We realize that there are others outside of Louisiana that are vitally important to the basin and we endorse the recommendations of the Red River Valley Association.

Red River Waterway, Mississippi River to Shreveport: Budget, $80,100,000; request, $105,950,000.—The Red River Waterway project was authorized in 1968 by the 90th Congress only after it was given the usual series of examinations and tests of its cost-benefit aspects which are unique to water resources projects and are not required of other types of programs. The project was found to comply with these requirements and to be amply justified even though these analyses do not allow credit for some types of benefit which are none the less real. The increased availability of water supplies for municipal and industrial use and the hydropower benefits of the project have not even been fully assessed. In spite of these omissions, the project was still found to be justified, both from the economical and environmental viewpoints.

The magnitude of local participation in this project is very large compared to similar projects in other areas. The Red River Waterway Commission of Louisiana has expended more than $13 million for the purchase of over 19,000 acres of rights-of-way and other local participation requirements since the project began. Additionally, local interests, through police juries, city governments, and port authorities have expended significant amounts in preparation for the development of adequate port and harbor facilities, looking forward to the day when commercial navigation will be a fact on the Red River and relying on our agreement with the Federal Government to construct the project. Additionally, the Commission has recently taken action guaranteeing that there will be a local sponsor for the development of hydropower on the Red River.

Construction on the Red River Waterway was drastically reduced for the period of 1980 through 1983 due to the failure of Congress to appropriate adequate funds for the project. During this period, the Commission continued to acquire rights-of-way requested by the U.S. Army Corps of Engineers and are now well ahead of construction with rights-of-way acquisition and with recreational development. Appropriation of an additional $25,850,000 beyond the proposed $80,100,000 will allow for the utilization of the rights-of-way already acquired by the Red River Waterway Commission and provide for the recreational development. These lands now lie idle due to the shortage of construction funds.

Extensive benefits of the navigation project in the areas of flood control, bank protection, reduced sedimentation, water supply, fish and wildlife, and valleywide development will result from completion of the waterway. The Red River basin is the last major river basin in the United States remaining to be developed and Louisiana has coordinated with the States of Arkansas, Oklahoma, and Texas in developing the navigation project. The area encompassing the Red River basin in Louisiana and adjacent States is economically depressed and suffers chronically from low employment. Major industries have not developed in the basin because of lack of navigation facilities and the uncertainty of river bank stabilization.

The State of Louisiana shares the goal of the President and the Congress of reducing deficits and of balancing the national budget. The additional funding we are requesting beyond the President's proposed budget will be compatible with the administration's economic goals for reducing deficits and continuing the economic recovery.

Red River emergency bank protection: Budget, $3,254,000; request, $12,000,000.—Thousands of acres of productive land are lost to the river each year and improvements must be relocated or abandoned when threatened by caving banks. Authorized under the River and Harbor Act of 1968, this emergency program treats major meanders and corrects misalignment prior to the time when normal construction funding becomes available. The funding requested will preserve the desirable alignment of Red River in addition to preventing the destruction of valuable property and improvements along the river at identified locations in Arkansas and Louisiana. If this work is not done now, far greater expenditures will be required in the future to accomplish the same ends.

Red River levees and bank stabilization below Denison Dam: Budget, none; request, $13,000,000.—The Red River levees and bank stabilization below Denison Dam project is the only comprehensive flood control program on the Red River containing authorization for construction of a variety of flood control measures, and for which there is no existing substitute. The facilities constructed under this authorization are the first lines of flood protection for the Red River Valley and its citizens.

Because of planned construction schedules for the Red River Waterway project, construction under this program has been inappropriately deemphasized. The Red River Waterway project is not a flood control project. For flood control purposes, it is imperative that the Red River levees and bank stabilization below Denison Dam program be resumed.

We request that the sum of $13 million be appropriated for this project in fiscal year 1985 to be used at several identified locations in Arkansas and Louisiana.

Red River Waterway, Shreveport, La., to vicinity of Index, Ark.: Budget, none; request, $520,000.—The Red River Waterway, Shreveport to Index reach, is an important part of the authorized project. We urge that the $520,000 capability be appropriated to continue planning in this area.

The State of Louisiana, and its Office of Public Works in particular, wishes to commend the Appropriations Subcommittees on Energy and Water Development and express our appreciation for the foresight and understanding exhibited in the past of the need for authorizing adequate levels of appropriations for water resources projects which are vital to the national interest. We solicit your further consideration of the recommendations presented herein.

CONCLUDING REMARKS

Senator COCHRAN. I think the panel has done an excellent job, Mr. Duggan, in presenting a strong case for the Red River Valley projects. I know Senator Johnston is glad that you are here today. He has been pushing this for a good while and has done a magnificent job keeping it on the front burner. I know that the committee will be working with you in trying to help bring this to completion.

I can personally testify that it can really rain over in Shreveport. I don't know about some of these other places. But I happened to be among those who didn't have any better sense than to sit through the entire Independence Bowl game. [Laughter.] There were 41,000 of us who did it. We hadn't had a bowl appearance by Old Mississippi in so long that we just decided we had to sit there for the whole time. That was the biggest rainstorm I have ever sat through. [Laughter.] But there were intelligent people all over the place sitting there. [Laughter.] Lightning hitting all around the stadium.

Senator JOHNSTON. It rains so rarely in Shreveport, they didn't understand what it was. [Laughter.]

Mr. DUGGAN. Thank you so very much for hearing us so patiently. There were a lot of important people accompanying us here today. I would like to introduce Gen. Ed Harris, our president and executive director; Mr. Doug Attaway over here; Mr. Barney Rothschild back here; Chester Wells; and Mr. Vince Foster. I saw him here a while ago. These men have contributed so much to the welfare of the Red River Valley Association down through the years. At this time, I would like to ask all of those here supporting the Red River projects to stand. Will you stand, please?

[Applause; large group standing.]

Mr. DUGGAN. Thank you very much.

Senator COCHRAN. We appreciate so much all of your being here.

I now recognize Senator Johnston.

STATEMENT OF HON. J. BENNETT JOHNSTON, U.S. SENATOR FROM LOUISIANA

Senator JOHNSTON. Thank you, Mr. Chairman.

Mr. Chairman, I want to welcome this group again. This is an event we look forward to. Our friends are not only leaders of the Red River Valley, but they are leaders in communities from which they come.

We especially want to welcome our friends from Arkansas and from Texas and from Oklahoma. We want to tell you we are with you on those projects which form a part of the Red River Valley effort. The chloride control work, the bank stabilization below Denison Dam, the emergency bank stabilization, all of these other projects which you have described, we are going to support on this committee. We always have. They are excellent projects.

I want to reiterate to you that when we get navigation up to Shreveport, that is not the end of the Red River. We are not going to realize the full impact, the full benefits of this project unless we bring it on up into your reaches.

I want to emphasize that, that we are together on that, because it is important for the whole region. It is important for the Nation that we do that.

Mr. Chairman, there has been a lot of talk about budget deficits and budget control. I don't take a back seat to anyone, and I know you don't, either, to reducing deficits and balancing budgets. Let me tell you something about this project.

We are talking about an infrastructure here, to use the modern word, we are talking about that which produces more in benefits than it costs.

If anybody is going to talk about sacrifice in the budget, let me tell you that the Corps of Engineers construction budget has been savaged, has been absolutely savaged these past few years. This year it is only about $800 million. If you want to take out the administrative costs, it is about $500 million. Just a very few years ago it was nearly $2 billion. So the Corps of Engineers construction budget has been cut way back, when at the same time this program produces permanent, lasting benefits annually which exceed the cost. Really and truly we ought to have a capital budget which is not counted as deficit spending, because when you spend money on the Red River in building a dam or whatever, you haven't lost that money. It is not like shooting a firecracker off, when it pops it is gone. That benefit is there virtually forever.

Most States budget on the basis of a capital budget. I don't know why the Federal Government doesn't do the same. I think if we did, we would look at some of these projects, and not just river navigation projects, but highway projects and other infrastructure projects, in a different light, because these are investments in America.

RED RIVER WATERWAY, LOCK AND DAM NO. 3

Now, Mr. Bennett, you testified to something which is I think the real keynote of what the Red River Valley needs to do this year, and that is to get lock and dam No. 3 under contract in fiscal year 1985. That is my first order of priority, and not just because we want to build it fast, we do. I can remember when we had the bumper stickers that said, "Big Red by '80." By 1980 we thought we could build and complete that project. We should have been able to, but we didn't. But at least we want to finish it before the year 2004, which is at the rate we are going, because if we leave it that long, then we have lost the benefits.

I mean all of these dollars that we are spending, and we have spent over half a billion dollars on the project now, if you can't use the project, you don't get any benefits from it. So to stretch it out, slow it down, seems to me is a great, great mistake. I hope that we can speed it up by letting the lock and dam No. 3 contract as a phased contract in fiscal year 1985, that we can simultaneously and concurrently design lock and dams 4 and 5 and not wait until we finish lock and dam 3 until we start on 4. That really constitutes an intentional slowdown. I mean that doesn't help you balance your budget; that just delays the benefits which are the reason we are building the project in the first place.

So, when it comes to balancing the budget, we have done our share and more. If you take any other part of this budget and reduce it as much as the Corps of Engineers has reduced not only would we have a balanced budget, we would be in the black. These programs have taken more cuts than any other, and we do more for the country than most of those other budgets do, too.

So, I don't have the slightest bit of hesitation in moving forward, trying to expedite on the Red River navigation project. Anybody who says to me, "Well, wait until we have a balanced budget," my answer to them is we have done more than our share and we are producing something for the money we invest. How many other budgets can meet that test.

Mr. Chairman, I didn't mean to make a big, long speech, but this is a vital project and this is such a good team we have out there and throughout the Red River Valley on up into Oklahoma and Texas that with this kind of teamwork, I think we are going to win this fight.

Senator COCHRAN. Well, you have provided strong leadership for it. I think the committee will get together and do everything that is possible to do to help move it forward.

Thank you so much for being here. You have been very helpful to the committee.

ADDITIONAL PREPARED STATEMENTS

Now, I know you have other statements and material which has been submitted—that will be made part of the record at this point

[A brief recess was taken.]

[The statements follow:]

STATEMENT OF THE RED RIVER VALLEY ASSOCIATION

1984

PLATFORM, RESOLUTIONS, AND WORK PROGRAM OF THE RED RIVER VALLEY ASSOCIATION

MEMBERSHIP RESOLUTION

The Red River Valley Association has for 59 years done notable work in the support and advancement of a program to develop the land and water resources of the valley to the beneficial use of all the people.

The Association is a voluntary group of citizens banded together to advance the economic development and future well-being of the citizens of the four state Red River Basin area.

To this end, the Red River Valley Association offers its full support and assistance to the various port authorities, chambers of commerce, economic development districts and other local governmental entities in developing the area along the waterway.

The members of the Association, convened in this 59th Annual Meeting, realize that further successful work of the Association is absolutely dependent upon continued financial support by its membership and prospective membership. We, therefore, urge each member to conduct a vigorous membership drive in his community and that the staff look to the registration list of this convention as a General Membership Committee to promote a larger, more active participation in the affairs of the Association.

To accomplish our goals, we invite and urge all firms, corporations and individuals within the Red River Watershed to invest in this Association. The development of the great Red River Watershed offers to its citizens a challenge: the opportunity to be of service to your community, state and nation, by participating in the objectives of the Red River Valley Association.

RESOLUTIONS ON AREA WIDE PROJECTS

RED RIVER BASIN ARKANSAS, TEXAS, LOUISIANA, AND OKLAHOMA - COMPREHENSIVE STUDY

The Red River Valley Association is aware of reconnaissance level study appropriations which were included in the Fiscal year 1984 Energy and Water Appropriations Bill for the above studies. These comprehensive studies would recommend measures for the following: control of flood; development of water supply; treatment, and conveyance facilities; the generation of hydroelectric power; the development and enhancement of the recreational potentials and enterprises of the region; and the improvement of the rivers for navigation and port-site development. The Red River Valley Association strongly supports the continued funding of this study and requests Congress to appropriate full Corps of Engineers capability of $335,000 to continue feasibility studies at 100% Federal Cost.

RED RIVER LEVEES AND BANK STABILIZATION BELOW DENISON DAM

Red River Levees and Bank Stabilization below Denison Dam is the authorization for constructing levees, flood control structures and bank stabilization below Denison Dam on the Red River. The facilities constructed under this authorization are the first lines of flood protection for the Red River Valley and its citizens. Accelerated and new caving of the river banks of Red River continue to endanger existing flood structures and levees as well as valuable agricultural lands, highways, railroads, utilities, homes and other valuable resources and improvements within the Red River Valley. A systematic program of bank stabilization and other flood control measures can prevent these disastrous losses that are presently occurring.

Because of planned construction of the Red River Waterway Project, a dangerous tendency has developed to de-emphasize construction of flood control and bank stabilization works under the Red River Levees and Bank Stabilization program. This tendency should be halted and reversed lest the impression be created that the program is no longer needed or has been completed.

The Red River Levees and Bank Stabilization below Denison Dam Project is the only comprehensive flood control program on the Red River containing authorization for construction of a variety of flood control measures, levees and other flood control works. Some of the projects planned in the original authorization project have not been completed, and these must be constructed in order for the citizens of the Red River to derive necessary flood protection.

During Fiscal Year 1983 no funds were appropriated by Congress for the Red River Levees and Bank Stabilization Below Denison Dam and in FY 1984 only the minimum amount of $1,600,000 was provided. Bank caving on Red River has progressed in several locations to a critical state. Railroads, major public highways, levees and other flood control works are threatened and unless action is taken in the near future, these facilities will be destroyed, endangering lives and property of the citizens of the Red River Valley.

Therefore, it is imperative that Red River Levees and Bank Stabilization Below Denison Dam continue as authorized by Congress and that adequate funding be appropriated to accomplish the construction of this sorely needed protection with the greatest possible speed. The Red River Valley Association urges that the sum of $13 million be appropriated for this project in Fiscal Year 1985 for the construction of these improvements and protection.

RIGHTS OF WAY COST RESPONSIBILITY

The Flood Control Act of 1946 provided for enlargement of existing levees and construction of certain authorized levees on Red River below Denison Dam. Language in the Act requires local interests to be responsible for all lands, easements and/or rights-of-way required for construction of the improvements. Levee districts and local governing bodies have found that the number of enlargements, setbacks and berms has progressively increased and rights-of-way costs have sharply increased, particularly in the last 10 years. Financial burdens resulting from increased costs for rights-of-way have steadily depleted limited revenues and funds of levee districts and local public bodies throughout the Basin area. The impact is so great that presently there are serious monetary problems and realistic doubt as to the abilities of various levee districts to continue to meet financial obligations.

The requirement of local interests to furnish all rights-of-way is not consistent with Congressional policy and is not compatible with other major river basin projects for flood control. It is obvious that modifications are drastically needed to correct these inadequacies.

The Red River Valley Association strongly urges Congress to amend the 1946 Flood Control Act to permit federal reimbursement to levee districts and local governing bodies for fair market value of lands taken for all flood control purposes including construction of new levees, levee setbacks, levee enlargement, levee turnovers, berms and cutoffs as necessary. Such modification is required at an early time to help relieve local levee districts and governing bodies of an extreme financial burden, and to assure progress advancement of the flood control program in the Basin.

UNIFORM RELOCATION ASSISTANCE ACT

The Levee Districts in the Red River Basin and the Red River Waterway Commission are experiencing increasing costs in the construction of navigation systems and construction and operation of flood control systems. The tax base of the basin lands is not capable of supporting additional tax loads to fund the relocation costs associated with levee setbacks, flood control works, and navigation projects.

The Federal Government through Public Law 91-646, known as the Uniform Relocations Assistance Act, provides that these relocation costs are the responsibility of and must be borne by local interests. The requirements and guidelines established in this act are such as to be extremely costly.

The Red River Valley Association does strongly urge and request the Congress of the United States to amend the Federal Uniform Relocations Assistance Act (PL91-646) to provide for federal payment of all such costs related to the construction of flood control and navigation projects in the Red River Basin of Louisiana, Arkansas, Oklahoma and Texas.

MAINTENANCE OF CHANNEL STABILIZATION WORKS

Past experience on Red River and many other river projects has shown conclusively that maintenance of channel stabilization works by local interests is impractical. Rapid changes in river conditions and alignment, such as occur frequently on Red River, demand drastic extensions and revisions of existing protective works, and, occasionally, required changes are so radical that relocations are necessary. Experienced personnel, special equipment and certain materials are not normally available from local interests when needed, and the costs of these items exceed the financial capabilities of local levee districts.

The Red River Valley Association recommends to Congress that the Corps of Engineers be authorized and directed to maintain all bank stabilization and channel training work on Red River.

BANK STABILIZATION
INDEX, ARKANSAS TO DENISON DAM, TX

Widely fluctuating stages and high flows during the past several years have caused sharp increases in bank caving along the Red River from Index, Arkansas, to Denison Dam. This accelerated bank caving has caused the loss of valuable vital improvements and non-replacable prime agricultural lands. Flood control structures and levees which protect the Valley from disastrous floods are also endangered.

These disastrous losses can be stopped by a systematic program of bank stabilization. Progressive construction of such a program is absolutely essential to the safety, growth, and well-being of the Red River Valley. To further delay this vitally needed protection would be short-sighted.

In view of the fact that construction of bank stabilization is so badly needed, and that the states of Oklahoma, Arkansas, and Texas have agreed to the authorized cost-sharing requirements, the Red River Valley Association strongly urges that the sum of $350,000 be appropriated in FY 1985 to continue reconstruction planning work.

EMERGENCY BANK PROTECTION

Although Federal projects have been authorized for flood control and navigation, many active caving banks cannot be stabilized because they are not yet sufficiently advanced or not included in earlier authorizations. The result is continuing rampant destruction of valuable lands, threatening vital flood control facilities and endangering high-cost improvements, such as bridges, pipelines, highways, railroads, utilities, cities and towns.

It is urgent that adequate funding of the item "Emergency Bank Protection" be continued to construct bank stabilization work as early as possible in the most critical locations instead of waiting several more years and losing many millions of dollars in damages. Further, continued neglect of these caving banks will substantially worsen alignment of the River, making future navigation realignment and stabilization much more costly and difficult. Many present caving banks have an existing alignment that is usable for the authorized navigation channel and should be preserved now.

In view of the critical needs for immediate bank stabilization at many locations along the river, and the great unnecessary losses to caving activity which have been suffered by the people of the Red River Valley in the past and which can be expected to continue in the absence of immediate stabilization construction, the Red River Valley Association strongly urges the Congress to appropriate the sum of $12 million in FY 1985 for Red River Emergency Bank Protection, so that some of the more critical of these locations can be stabilized.

RED RIVER WATERWAY PROJECT

The Rivers and Harbors Act of 1968 authorized the Red River Waterway Project featuring a navigation channel from the Mississippi River to Shreveport, Louisiana, and Daingerfield, Texas, and stabilization of the banks of the Red River from the Mississippi River to Shreveport, Louisiana; Shreveport, Louisiana, to Daingerfield, Texas; Shreveport, Louisiana to Index, Arkansas, and vicinity of Index, Arkansas to Denison Dam, Texas. Construction under this authorization has been initiated in the Mississippi River to Shreveport, Louisiana, Reach.

Completion of the Red River Waterway will significantly boost the economy throughout the river basin and reduce widespread unemployment of the area. Average annual shipping on the waterway is expected to be at least 8.3 million tons and estimated benefits are in the amount of $70 million annually. This type of progress should not be denied citizens of the Red River Basin and the nation. In order to begin realizing project benefits and minimize future project cost increase, planning, design, and construction should proceed in an orderly fashion in order to achieve project completion in a reasonable time.

The Red River Valley Association urges Congress to appropriate construction funds for FY 1985 in the amount of $105,950,000 to continue orderly construction from the Mississippi River to Shreveport, Louisiana reach and provide $100,000 for resumption of preconstruction planning on the waterway segment from Shreveport, Louisiana, to Daingerfield, Texas, and the amount of $520,000 to Index. These funding levels are required for FY 1985 to result in comprehensive coordinated advancement of these basinwide features. Planning on the upper reaches must continue in order to initiate construction which complement ongoing construction in the lower reach and ultimately provide the maximum project benefits to the people of the Red River Basin.

RED RIVER BASIN CHLORIDE CONTROL

The Red River Valley Association is vitally concerned with the control of the 10 natural salt pollution areas within the upper Red River Basin. There exists a vital and natural interest in reducing the mineral pollution of the Red River for economic growth as directly related to agricultural, municipal, and industrial benefit. The Association has actively supported the work of reducing man-made pollution of the river and has followed, with keen interest, the work of the Corps of Engineers in finding sources of natural salt pollution and devising ways of abating them.

Passage of the 1966 and 1970 Flood Control Acts (P.L. 89-789 & P.L. 91-611) authorized construction of measures to control the natural salt pollution from Areas VI, VII, VIII, IX, X, XIII, XIV, and XV in the basin, subject to the provision that construction on the project could not be started until approved by the Secretary of the Army. Initiation of construction on Area VIII on the Wichita River prior to the required approval by the Secretary of the Army, was authorized by the 1974 Water Resources Act. Construction on Area VIII, which includes the Truscott Brine Lake, was begun in February 1977 and is nearing completion. With the exception of Area VIII, construction on the remaining seven areas and two brine lakes of the Red River Chloride Control project is awaiting approval by the Secretary.

The approval of the Red River Chloride Control report, submitted to the Secretary of the Army in August 1977, was deferred pending an economic reanalysis conducted by the Corps of Engineers. The economic reanalysis, which reaffirmed the economic feasibility, was submitted to the Secretary of the Army for final action in 1981. The Red River Valley Association understands that the Secretary has approved the report and the issue delaying clearance for construction is the matter of cost sharing. It is the intent of the authorizing legislation that removal of natural pollution is a Federal responsibility and removal of man-made pollution is a non-Federal responsibility.

Since the time these responsibilities were identified, the Red River Valley Association members have worked closely with the participating states to assure that local responsibilities have been successfully undertaken in a fully cooperative manner. This effort was performed in anticipation that Federal responsibilities would be executed in a responsible and timely fashion. The State of Texas has expended over $52 million controlling man-made salt pollution over the past years, and the State of Oklahoma is spending $5 million annually.

Therefore, we fully believe the non-federal role is being achieved and will continue to be strengthened. However, the cooperative project goal to make basin waters suitable for beneficial use cannot be attained unless the Federal government honors its long-standing commitment and discharges its responsibilities. The Red River Valley Association strongly requests that the Secretary of the Army immediately forward the report on this project to OMB with a favorable recommendation for the initiation of construction on the remaining areas and the Corps of Engineers receive 100% Federal funding to initiate construction on Areas VI and X in FY 1985 at their full capability level.

RED RIVER BASIN BENEFICIAL USES OF SALT WATER

On September 23, 1982, the U. S. House of Representatives, Committee on Public Works and Transportation, adopted a resolution directing the Corps of Engineers to determine the feasibility of salt gradient solar ponds and associated power generation equipment to collect and store solar energy and to generate electric power in the Red River Basin.

The inherent thermal storage capability of salt gradient solar ponds and the associated solar pond power plant (SPPP) concept offers a potentially viable alternative energy source which makes use of abundantly available natural resources (sun, salt, and land) and existing technology (i.e. heat exchangers and low temperature turbine generators). The necessary resources are readily available in the Red River Basin, particulary in western Texas and Oklahoma where there are identified sources of salt brine in economical quantities feasible for use in conjunction with solar ponds.

The Red River Valley Association strongly supports the resolution and Congress' appropriation of $50,000.00 in FY 1984 to initiate studies. The Association requests that the fully stated FY 1985 capability level of the Corps of Engineers be appropriated at 100% Federal cost to continue these studies.

HYDRO-ELECTRIC POWER DEVELOPMENT

At the time money for the Red River Basin projects were initially authorized, the need for alternate energy sources was not deemed of paramount importance to the welfare of the nation, and, therefore, hydro-electric power generation was not incorporated as a feature in any of the authorized projects.

Since the mid-70's the energy situation has changed drastically, forcing the nation to begin investigating methods of developing and utilizing alternate energy sources such as hydro-electric power. In keeping with this important trend, the Corps of Engineers has been authorized to conduct feasibility studies for hydro-power development at Denison Dam and Pine Creek, Hugo and Lukfata Lakes, the Locks and Dams on the Red River Navigation project, as well as other projects in the Red River basin.

The Association strongly urges continued funding for these feasibility studies to ensure that optimum power generation can be achieved through these projects while, at the same time, insuring that the water supply needs of the community affected by these projects continue to receive priority emphasis.

NATIONAL ENVIRONMENTAL POLICY ACT

The National Environmental Policy Act of 1969 has been interpreted in such a manner as to cause economic hardship on man. An example is the Cooper Lake and Channels Project in Texas which was halted due to an Environmental Lawsuit under NEPA with a cost increasing from $24,000,000 in 1968 to $63,000,000 in 1975 and in excess of $138,000,000 in 1984.

The Red River Valley Association urges Congress to revise this Act to:

1. Streamline administration procedures under the Act so as to speed up the time for completion and review of an Environmental Impact Statement in a Federal Project.

2. Recognize man as a part of the Environment and require that the effects upon man be taken into account in the preparation and analysis of an Environmental Impact Statement.

3. Make requirements that any person, association, or other entity desiring to contest the adequacy of the administration procedures in preparation and/or review of Environmental Impact Statements to be required to post bond in evidence of financial responsibility to reimburse the constructing agency for cost of delay in the event that the Environmental Impact Statement and/or procedure appealed from is found to be adequate, if not otherwise provided by existing law.

The membership of the Red River Valley Association is deeply concerned about unwarranted delays that add additional costs to Red River Basin projects resulting in severe hardships on the citizens of the Red River Basin. The membership urges that Congress direct public officials and agencies to proceed with sound long-range development of the Red River Basin and its resources for the benefit of Arkansas, Louisiana, Oklahoma and Texas.

REGULATING LAND USE

In the past, proposals have been offered in the U. S. Congress and in some state legislatures to regulate and control the use of privately owned lands without compensation to the owner. These "land use" bills have been recognized by these legislative branches of government as contrary to the Fifth Amendment to the Constitution of the United States and soundly defeated each time they were offered. Therefore, this Association opposes any national land use legislation.

MITIGATION LANDS

The present interpretation held by the U.S. Fish and Wildlife Service in relation to "mitigation lands" for water conservation projects greatly hinders development of water supplies, flood control and bank stabilization projects. This interpretation requires taking large amounts of lands out of private ownership for wildlife management purposes. This reduction in private land ownership represents a considerable economic and tax base loss. This same loss is greatly compounded by the increased cost to the overall construction project.

The Association, recognizing the need for a balance between the environmental aspects and people's needs, strongly urges Congress to press for a revision of the present interpretation held by the U.S. Fish and Wildlife Service in order to make it compatible with Congressional intent and the needs of the people.

SMALL WATERSHED PROGRAM

The Red River Valley Association has long recognized the value of the Small Watershed Program (Public Law 566) for protecting and improving the soil and water resources of our nation. The planning and carrying out of resource improvement projects in small watersheds of less than 250,000 acres, as provided in Public Law 566, gives to rural and small town America an effective tool to span the gap between large watershed resources improvement projects of the Corps of Engineers and small, individual projects, carried out by landowners and operators.

Public Law 566 has become a well-known and respected program of federal, state and local partnership in resource improvement and protection in the Red River Valley. The Red River Valley Association reaffirms its support of the Small Watershed Program and urges its effectiveness be increased through appropriate increases in funding and personnel to allow maximum utilization of benefits.

RESOURCE CONSERVATION AND DEVELOPMENT PROGRAM

The Resource Conservation and Development (RC&D) program of the United States Department of Agriculture is authorized by Public Law 87-703. The RC&D program provides a vehicle for the local initiative that can bring together all applicable federal and state agencies to provide technical and financial assistance to carry out needed environmental, cultural, and economic enhancement developments.

The RC&D program is now active over about 75% of the area covered by RRVA. Those active RC&D Areas are listed by states as follows:

Texas: North Rolling Plains at Pampa, Four Winds at Quanah, NorthEast Texas at Paris.

Oklahoma: Great Plains at Hollis, ASCOG at Duncan, Fun Country at Ardmore, Ouachita Mountains at Wilburton.

Arkansas: Southwest Arkansas at Magnolia.

Louisiana: Trail Blazer at Minden, Twin Valley at Coushatta.

The RRVA realizes the beneficial impact the RC&D program has on our area's overall economic stability and therefore fully supports the RC&D program on the local and regional level to strengthen its potential overall effect and urges Congress to maintain an adequate funding and program direction.

OMNIBUS WATER LEGISLATION

The Red River Valley Association urges the United States Senate and House of Representatives to approve omnibus water legislation that would benefit the nation through the proper development and management of the water resources of America.

The Red River Valley Association urges the Congress to give prompt, and favorable consideration to an Omnibus water bill so that it may be passed and placed into law during 1984.

CADDO LAKE - LOUISIANA AND TEXAS

The States of Louisiana and Texas have entered into a binding agreement, "The Red River Compact", that has been ratified by Federal Mandate. The Compact addresses the Cypress Basin (Texas/Louisiana) and specifically establishes guidelines for the conservation/preservation of Caddo Lake. The Compact establishes safeguards for each political entity as it relates to modification, diversions, restrictions and future development. The Red River Valley Association supports the accomplishment of the feasibility study currently underway by the USCE, Vicksburg District, to determine the potential of Caddo Lake to provide a part of the water supply needs of the region and we urge the Congress to continue funding the study.

MISSISSIPPI RIVER AND TRIBUTARIES FLOOD CONTROL PROJECT

The Red River Valley Association endorses the Mississippi River and Tributaries Flood Control Project, including all of its features and components and stresses the importance of aggressively completing all features, particularly as it relates to the Red River Basin and its improvements. As a major tributary to the Mississippi River and Tributaries Flood Control Project, the Red River Valley Association endorses the flood control and navigation improvements of the MR&T Project and necessary appropriations for completion.

ARKANSAS RESOLUTIONS

RED RIVER WATERWAY PROJECT, SHREVEPORT TO INDEX-ARKANSAS

Completion of the Red River Waterway Navigation Project to Index, Arkansas, will significantly boost the economy throughout the river basin and reduce widespread unemployment in the area. Great economic benefit will accrue not only to that portion of the river wherein navigation is currently authorized, but also to the area between Shreveport and Index from a comprehensive bank stabilization program. This type of program should not be denied citizens of the Red River basin and the nation.

The Red River Valley Association urges the Congress to appropriate Corps of Engineers capability of $520,000 for the continued planning of the reach of Red River from Shreveport to Index. Adequate funding is required to result in comprehensive coordinated advancement of these basin-wide features which will allow construction to commence as soon as possible in the reach between Shreveport to Index. Planning on this upper level must be accomplished in order that construction can be completed for the navigable portion of the channel from the Mississippi River to Shreveport on a timely basis, as this project will complement the navigation channel so that maximum basin benefits can be provided simultaneously.

DAYS CREEK/ NIX CREEK

Days Creek and Nix Creek and their tributaries have caused frequent inundation of residences and business properties situated within Texarkana, Arkansas, and Texarkana, Texas. A plan has been prepared by the Corps of Engineers for improvement of these Creeks and their tributaries to substantially reduce flooding in the two cities.

Funds were appropriated by the Congress to undertake the Phase I design memorandum stage of advanced engineering and design, but the Chief of the Corps of Engineers refused to spend the funds following review of a feasibility study that showed that some of the benefits were not applicable and that the cost benefit ratio was not at an acceptable level.

The Red River Valley Association believes the project would prove to be a viable project if an updated feasibility study is conducted to include numerous factors not considered by the previus study. We, therefore, request that Congress provide a sufficient sum of money for Fiscal 1985 to support the full capability of the Corps of Engineers to conduct a re-study of the feasibility of this project.

HEMPSTEAD COUNTY LEVEE IMPROVEMENT

The Corps of Engineers has completed certain soil stabilization work on the banks of the Red River within the boundary of Hempstead County Levee District #1. However, in the interest of all citizens in the area, additional bank stabilization work is necessary to extend the present Brushy Revetment 1,000 feet to the south and extend the Fulton Revetment 1,500 feet to the north. The Association supports the efforts of Hempstead County Levee

District #1 to obtain authorization and funding for this needed bank stabilization work.

LITTLE RIVER REVETMENT

The City of Hope, Arkansas, secures its municipal water from the Little River Water supply. The Hope Water and Light Commission has determined that the height elevation of the Little River Revetment is inadequate to insure maximum cleanliness to the City of Hope's water supply and has determined that it is necessary to increase the Little River Revetment from its present 243 foot elevation to 250 foot elevation in order to eliminate the danger of Red River flood infiltration into the City of Hope's Little River water supply. The Red River Valley Association urges Congress to provide the authorization and funding necessary to increase the elevation of the Little River Revetment from 243 feet to 250 feet to protect the City of Hope's water supply from Red River flood infiltration.

LOUISIANA RESOLUTIONS

GENERAL RESOLUTIONS

LOCAL COST SHARING

This Association is strongly opposed to policies and positions adopted during the past few years by the Army Chief Engineer's office relating to local cost sharing in certain Red River Basin flood control projects. As a result of former President of the United States Jimmy Carter's water policy message to Congress of June 6, 1978, the Chief of Engineers has interpreted that certain major flood control projects should be funded under the National Cost Sharing Standards enacted by the June 22, 1936, Flood Control Act (P.L. 74-738).

The Association stands on the premise that the need for flood control in the backwater areas and lower tributaries of the Mississippi River are part of a national flood control problem and should be solved with Federal funding. Further, due to the magnitude of most projects, non-Federal cost sharing would place these projects out of reach for local authorities.

CONGRESSIONAL AUTHORIZATION FOR NEW PROJECT STUDIES

Numerous project studies are being authorized by Congress without prior notification of the responsible agency. This results in inadequate information and justification data from the state and local interests level and overloads the Corps of Engineers' personnel and facilities causing long delays and insufficient investigations. Consequently, many worthwhile projects are not justified or constructed. The Association recommends that a procedure be established whereby the responsible agency of the State will be notified and requested to comment on and submit its views concerning the desirability of the proposed project study before Congressional authorization is made.

FEDERAL PROCEDURE FOR A PROJECT STUDY

Current procedures require the Corps of Engineers to hold at least three or more public hearings for all studies authorized by Congress. The initial public hearings held at the beginning of the study provide the proponents and opponents of the proposed project ample opportunity to express their desires and needs. Prior to submission of the completed study to higher authority for review, a second public hearing is required. In addition, interim public meetings are held to again obtain the recommendations of the local interests as to which type solutions are desired. The additional hearings result in an overall project delay with increased study costs and, being repetitious, do not advance the project in any way. The former procedures used by the Corps of Engineers requiring the Division Engineer to issue a notice of survey report to all interested parties effectively accomplished the overall purpose of the second public hearing. The Association is opposed to the project study procedure requiring the additional hearing and recommends that the former procedure be re-established.

CHANGES DURING A FEDERAL STUDY

During the phase of completing the General Design Memorandum in an authorized study, local interests, levee boards and the Office of Public Works should be kept advised of the plan, and in particular, any changes of the originally authorized plan as it may affect the project and/or the purpose of the project.

FLOOD CONTROL STUDIES

In the past, there have been many unfavorable reports on investigations of flood control needs and proposals when they are generally known to be justified and need to prevent recurring extensive flood damages. In recent years, the U. S. Army Corps of Engineers and other controlling branches of the Fedeal Government announced more realistic procedures and policies to be employed in making economic evaluation studies. However, projects receiving favorable recommendation by the Chief of Engineers are being penalized through extended time delays while awaiting authorization. The Association very strongly urges that procedures be established to shorten the time requirements for authorization of a justified project. Efforts should be continued in the future to develop more efficient and practical means through which projects can be studied, authorized and constructed. Also, when determining local requirements for a project, the Congress and Corps of Engineers should recognize, on an equitable basis, the large amounts of money expended by local interests in constructing interim protective works prior to authorization of a comprehensive project.

NEW CONSTRUCTION

Flood control and other Public Works projects must be considered as essential to the development of local resources which are vital to the economy of the Nation. Such works are important to the millions of citizens and multi-billions of dollars of agricultural, industrial and public developments directly protected in our 4-state area. The Association urges that these facts be recognized and all restrictions on new construction starts be removed, together with appropriations of larger funds to complete the flood control projects in the State of Louisiana as rapidly as project conditions, personnel and equipment will permit. Flood protection in the Red River Basin must not be placed in jeopardy.

CORPS OF ENGINEERS 404 PERMIT PROGRAM

The Association wishes to commend the Federal government for the recently instituted revisions to and streamlining of the permit program under Section 404 of Public Law 92-500 which now requires that the Corps of Engineers complete the permit process and respond to an applicant no later than 60 days from the date the application is received. This is a major improvement to a system that in the past has unnecessarily and substantially delayed, hampered and increased the cost of urgently needed water resource projects and in some cases perhaps completely blocked such projects, many of which were being undertaken by mandate of State and Federal law.

CLARIFYING DEFINITIONS

The Association urges Congress to clarify the definitions of "Waters of the United States" and "Navigable Waters" so as to make unmistakably clear the intent of Congress: that Federal control of construction of water resource projects through control of the discharge of dredged or fill material be limited to waters which are, in fact, navigable and used as a means to transport interstate commerce.

FLOOD PLAIN ZONING

While flood plain zoning is considered proper for urban or industrial development when applied to narrow flood plains, it has no application in the broad alluvial flood plains of the Red River Valley. It is, therefore, requested that the Corps of Engineers and the other agencies undertaking flood plain zoning studies take this significant difference into consideration.

STATE PROJECTS RESOLUTIONS

CYPRESS-BLACK BAYOU WATERSHED

Local interest and the State of Louisiana, in cooperation with Soil Conservation Service, have advanced construction of this project to the point where many benefits are being realized. Features of the project include land treatment measures; two multiple purpose reservoirs for irrigation, recreation and municipal water supply; a comprehensive recreational facility development; and approximately 55 miles of channel improvement for flood prevention and agricultural water management; and 11 weirs, 2 pumping plants and water control structures for distribution and irrigation use of water. Those features remaining to be constructed consist of the channel improvements, weirs, pumping plants and water control structures. Through these features, the agricultural water needs of the central Bossier Parish area can be met during most years and some assistance in meeting municipal and industrial water needs is also provided.

The Red River Valley Association expresses its sincere appreciation for Congressional support of funding for the Cypress-Black Bayou Watershed development and recommends that the financial support necessary for completion of the project be provided.

BODCAU RESERVOIR WATER SUPPLY STUDY

Bodcau Reservoir was constructed for flood control in 1949 by the Corps of Engineers. However, Northwest Louisiana is currently experiencing water supply problems. Existing sources of water have been taxed beyond their dependable supply at the present time. Water rationing is common practice in several comunities within Northwest Louisiana. The Shreveport-Bossier City metropolitan area is also facing the problem of an insufficient water supply, necessitating the development of available sources of water to meet the present and future water demands in Northwest Louisiana.

The Bossier Parish Police Jury and the City of Bossier City have requested the Corps of Engineers to study Bodcau Reservoir as a source of water supply to meet existing and future water demands. Preliminary reports indicate that Bodcau Reservoir can supply an adequate amount of water with minor modification to existing structures.

The Red River Valley Association urges the Corps of Engineers to proceed with the necessary studies in a timely manner so that an adequate water supply may be obtained and the orderly development of the region continue.

BAYOU BODCAU AND TRIBUTARIES

The Bayou Bodcau and Tributaries Project was authorized in 1965, with construction actually beginning nine years later in 1974. This project, as originally planned, provided for improvements to Cypress Bayou, Red Chute Bayou, Loggy Bayou, and Flat River with construction of levees, channel enlargement and drainage structures. Approximately 62 miles of levees and 12 miles of channel enlargement were proposed to be constructed.

The Bayou Bodcau and Tributaries Project has progressed to the point where the Corps of Engineers has constructed 15 miles of levee on the northern end of the project, ending immediately south of Bossier City, and local interests have constructed the 12 miles of channel improvement.

Since the project authorization in 1965 land use changes have occurred within the project limits, especially south of Bossier City. Lands that were predominately agricultural are now being used for residential development. The Corps of Engineers has informed the local sponsor that some 5,000 acres of flood easements will have to be obtained south of Bossier City, some of which contain substantial residential development. The flood easements south of Bossier City were not included in the project as authorized and it is presumed that the authorized project intended to protect all lands subject to flood below Bossier City.

The Corps of Engineers have recommended that a comprehensive review of the remainder of the project be undertaken.

The Red River Valley Association strongly urges the Corps of Engineers to expedite their review of the project and to provide whatever modifications are necessary for the protection of all lands subject to flooding south of Bossier City as the project was originally authorized.

The Red River Valley Association also urges that Congress continue to fund the Bayou Bodcau and Tributaries Project at a level necessary for Project completion at the earliest possible time.

HYDRO-ELECTRIC FEASIBILITY OF RED RIVER LOCKS AND DAMS

At the time the Red River Waterway Project was authorized, the need for energy was not of paramount importance to the welfare of the nation, and therefore, hydro-electric power was not incorporated as a feature of the navigation project.

Due to the energy shortage and the need to reduce our dependency on high cost foreign energy sources, it is desirable to consider the incorporation of hydro-power as an important feature of the Red River locks and dams.

Therefore, the Red River Valley Association strongly urges Congress to fund the Red River Waterway Project in an amount sufficient to utilize the full capability of the Corps of Engineers in pursuing a conclusion to their study of hydro-power feasibility for the locks and dams on the Red River Waterway Project so that the full benefits of the Project can be realized.

OVERTON-RED RIVER WATERWAY, LOWER 31 MILES

Construction of channel improvements in the lower 31 miles of the Overton-Red River Waterway Project, which forms an integral part of the Red River Waterway Project plan, began several years ago and has progressed to the point where only a few project features remain to be constructed. Improvements in this reach are important to both the Red River Project and the project for navigation on the Ouachita and Black Rivers. In order to assure that the remaining items of work will be accomplished in a timely fashion, the Red River Valley Association urges that Congress and the Corps of Engineers take no steps to de-authorize the Project or to declare it completed before construction of the remaining items have been accomplished.

ATCHAFALAYA BASIN

The Atchafalaya Basin is a key element in the flood control plan for the Mississippi River and its Tributaries, that directly involve the Red River Basin area. Flood control is the primary purpose of the basin and the flood control capability of both the Atchafalaya Basin and the Red River Basin must be maintained and improved.

The Red River Valley Association opposes any plan for use of the Atchafalaya Basin which reduces its effectiveness for flood control. The Association does not oppose other uses of the basin, provided they do not interfere with or prevent its use for flood control purposes.

The Association urges that the studies being done of the basin area be concluded as soon as possible and construction of the necessary flood control works in the area be resumed immediately.

RED RIVER BACK WATER AREA

The Red River Backwater Project was authorized by the Flood Control Act of 1941. The act specifically authorized the Tensas-Cocodrie levee system and provided for additional flood protection work in the Red River Backwater area. A review of the flood control needs of the area was made in the late 1950's and the result of this review is printed as House Document 308 (88/2); HD 308 was approved by the Flood Control Act of 1965 (PL 89-298). The review concluded that flood protection works were justified and authorized for the

Larto Lake to Jonesville Area, the Sicily Island Area, and the Below Red River Area. The review also concluded that a pumping plant was justified for the Tensas-Cocodrie Area; the pumping plant was specifically authorized by the Flood Control Act of 1965. Public Law 96-367 contains language authorized by the Flood Control Act of 1965 affirming the authorization of flood control works in the Red River Backwater area.

The Tensas-Cocodrie and Larto Lake to Jonesville levee systems have been constructed and are providing flood protection to valuable farm land, rural residential areas, and developed areas. Segments of the Tensas-Cocodrie Levee System are below grade and need to be enlarged. The Tensas-Cocodrie Pumping Plant is under construction and, when completed, will provide additional flood protection to Tensas-Cocodrie area. Congress has provided funds to initiate construciton of the Sicily Island area project. Advanced planning of the Below Red River Project is continuing.

The need for flood protection in the Red River Backwater area is critical. The entire area has suffered extreme tragedies in the flood years of 1973, 1974, 1975, and 1983, and has widespread flooding at least annually or more frequently. The flood protection of these specific aras is justified and authorized and should be completed promptly.

The recommended plan for the Below Red River Project included construction of a new levee, upgrading the existing Moncla to Lake Long levee, a flood gate and pumping plant, an interior channel to route drainage to the outlet, and minor structures as needed to facilitate drainage of low areas. This plan will meet the needs of area inhabitants by reducing the adverse impacts of flooding and providing for intensified agricultural productions, and has been endorsed as the best levee plan by the U.S. Fish and Wildlife Service and the Louisiana Department of Wildlife and Fisheries.

The Red River Valley Association urges that Congress approve the full capability of the Corps of Engineers for the Below Red River Project in FY 1985 for the completion of advanced planning, and that the Louisiana Congressional delegation do all in its power to expedite construction of this much needed project.

The planning report for the Bushley Bayou Project has been completed. The Red River Valley Association urges the support of the Bushley Bayou Project, as recommended by the Mississippi River Commission, and that Congress approve the full capability of the Corps of Engineers for FY 1985 so that advanced planning of this vital project may continue.

Many changes have occurred in the usage of lands, drainage patters, vegetative cover, flooding frequencies, and other factors in the larto Lake-Saline Area in recent years. The changes have resulted in serious water quality problems in the area. On January 22, 1973, the Senate Public Works Committee adopted a resolution providing for a comprehensive study of these problems. The study encompasses 200,000 acres within Catahoula, LaSalle, Rapides, and Avoyelles Parishes generally south of Catahoula Lake.

The Red River Valley Association requests that Congress approve the full capability of the Corps of Engineers in Fiscal Year 1985 for completion of this study, and further urges Congress to support all of the above features of the Red River Backwater Project and to approve the full capability of $9,586,000 for FY 1985.

BAYOU COCODRIE AND TRIBUTARIES

This project was authorized in 1941 and provides a drainage outfall for a large area of central Louisiana, including 120 miles of drainage channel, three water control structures, and a major drainage structure in the West Atchafalaya Basin Protection Levee. The upper 100 miles of the project extending from Rapides Island west of Alexandria, Rapides Parish, to the town of Washington, St. Landry Parish, is known as the Bayou Bouef-Cocodrie Diversion Channel. The lower 21 miles is Bayou Courtableau.

Most of the project was completed in 1952. Since that time, as a result of extensive developments throughout this intercepted drainage area, stages in the main channel system have continued to rise and have exceeded the design water surface by several feet on a number of occasions. Under present conditions widespread flooding of agricultural lands and extensive damages from flooding of residential area occurs and is increasing with each passing year. There is a critical need for improvement to these drainage channels which are intercepted by construction of the Red River South Bank and West Atchafalaya Floodway Levees.

For the lower part of the project (Bayou Courtableau), advanced engineering and design were considered to be completed in 1980. It now appears additional studies of this portion of the project are necessary. These additional studies will continue to delay construction of several PL 566 projects for drainage improvements in this area which have not been allowed to proceed because of inadequate outlet through Bayou Courtableau. The Red River Valley Association urges that these additional studies be promptly completed so that construction of this outlet can begin.

For the upper part of the project, Bayou Boeuf-Cocodrie Diversion Channel, the system is under a continuing re-study to determine improvements that need to be accomplished in the system. It is recommended that this study be completed and improvements authorized at the earliest time possible.

BAYOU RAPIDES PUMPING STATION NEAR ALEXANDRIA, LOUISIANA

The Bayou Rapides Pumping Plant was constructed in 1930-1931 by the State of Louisiana and the Red River, Atchafalaya and Bayou Boeuf Levee District with a pumping capacity of 100,000 gallons per minute. Located beneath the pumping station are six (6) reinforced concrete gated openings to provide drainage by gravity when Red River stages permit. During high river stages, the floodgates must remain closed.

The present pumping capacity should be increased eleven times to 1,100,000 gallons per minute which is necessary to provide reasonable protection against flooding for a 25-year storm frequency.

This pumping station is a necessary integral major structure incorporated into a complicated drainage system for the City of Alexandria and connects to the Bayou Rapides-Bayou Cocodrie Drainage system and also to Red River. As a major structural feature providing for intercepted drainage resulting from Federal levee construction, it is clearly established that replacement of this pumping station with an adequate capacity is a responsibility of the Federal Government.

The Red River Valley Association strongly urges the Corps of Engineers to expand the existing "Bayou Cocodrie & Tributaries" study and include the Bayou Rapides Pumping Station as a feature of the overall interconnected drainage system, with a view to authorization and construction of adequate pumping and/or drainage facilities. Further, if such addition to the existing study results in drastic delay and/or funding impacts, then the Red River Valley Association recommends separate Congressional authorization for this urgently needed study.

COMPREHENSIVE BASIN STUDY

CANE RIVER ISLAND FLOOD CONTROL STUDY

In June, 1956, authorized by the Flood Control Act of 1936, construction was completed on the existing Red River flood control system from the city of Natchitoches, Louisiana, to the Town of Marco, Louisiana. The project consisted of the construction of levees on the south bank of the Red River, a dam at the mouth of Cane River, and enlargement of interior drainage to give protection to 135,000 acres of land in the Cane River Island area from Red River overflow.

During periods of high water drainage gates must be closed preventing interior drainage, and backwater flooding occurs along the Cane River and Old River from the Red River. Continued development of the area and flooding in recent years resulted in a resolution adopted by the Committee on Public Works of the U. S. Senate to re-study the area for possible further flood control measures. In February, 1978, at the urging of local interests, the study of the Cane River Island area was expanded to include the entire Cane River Basin.

The Red River Valley Association urges that this study be conducted and completed as quickly as possible so that construction of needed additional flood control devices can be accomplished in the near future. Further, the Association recommends that the sum of $335,000 be appropriated for this comprehensive basin study in Fiscal Year.

ALOHA - RIGOLETTE PROJECT

This project, authorized in 1941, and constructed during the period from 1943 to 1954, provides for protection of some 58,000 acres of alluvial land during high stages of the Red River. Drainage from 340,000 acres that must flow through protected areas during lower river stages is disposed of by gravity flow through two 10 ft. by 10 ft. gated concrete drainage structures in the levee at the lower end of the project. This protected area has continued to develop agriculturally since construction of the project and now additional gates are needed to allow adequate gravity drainage during low river stages. As a result, local interests have requested that additional studies be made of the project, paying particular attention to the adequacy of the floodgate.

A study has been essentially completed by the New Orleans District, and a draft report is now in the Division Office for review. The report is expected to be ready for public review by this spring, and completed by September, 1984.

The Red River Valley Association urges that the feasibility study be completed on schedule, that the study contain a recommendation for construction of additional improvements for drainage of the area, and that Congress appropriate the capability of $500,000 in Fiscal Year 1985 to continue planning and engineering on the project so that it can be advanced to the construction stage as soon as possible.

LOWER RED RIVER SOUTH BANK LEVEE

The South Bank Levee is a feature of the Mississippi River and Tributaries Flood Control Project and calls for improvement of the existing levee from the community of Hot Wells to Moncla. Construction procedures include: strengthening and enlarging substandard levee reaches, raising the levee to the designed grade, bank stabilizatin to protect the levee, and other miscellaneous levee and roadway improvements. This levee is of outstanding importance since it protects 1.25 million acres of valuable lands and improvements from flooding. This work should be completed in a timely and orderly manner; therefore, the Red River Valley Association endorses an adequate appropriation of by Congress for Fiscal Year 1985.

EASTERN RAPIDES - SOUTH CENTRAL AVOYELLES DRAINAGE DISTRICT

After many years of delay, the Eastern Rapides-South Central Avoyelles Drainage Project was authorized as a feature of the Mississippi River and Tributaries Flood Control Project. Unfortunately, construction has not been started subsequent to the authorization of 1970.

This project encompasses the upper part of a drainage system that would directly and indirectly benefit parts of the parishes of Rapides, Avoyelles and Evangeline where more than 206,000 acres of valuable agricultural land are subject to flooding.

Flooding of this acreage occurs at least four times a year and results from an act of the Federal Government authorizing construction of the South Bank Red River Levee and the West Atchafalaya Basin Protection Levee which intercepted the natural drainage channels. Additionally, one large urban area — the City of Alexandria -- is adversely affected by the poor drainage conditions that drastically need improvement.

There is an urgent need to begin work on this extensive project, which would traverse southeasterly from Alexandria for some 80 miles before entering the Atchafalaya Basin Floodway.

Studies have been made and public hearings have been held in Marksville and Opelousas. The Association strongly urges the Corps of Engineers to complete determination of possible alternatives and reach a final decision as to the recommended solution without making additional studies and incurring further delays so that construction can begin as quickly as possible. Further, the Red River Valley Association recommends an adequate appropriation by Congress in Fiscal Year 1985 to complete the remaining preconstruction planning and begin construction.

LOWER RED RIVER LEVEES

The South Bank Levee in the Red River, Atchafalaya and Bayou Boeuf Levee District from Boyce to Moncla is a feature of the Mississippi River and Tributaries (MR&T) Flood Control Project, but the lower few miles of this same levee from Moncla to Lake Long is under different authorization, precluding the benefits of the MR&T authorization to the people and property in the protected area. The North Bank Levee of Red River, in the same Levee District, does not benefit from the MR&T authorization although they also protect the lives of many people and vast areas of farm land and improvements.

Both the South Bank and the North Bank Levees of the Red River are part of a continuous protective system; the lower few miles from Moncla to Lake Long are a part of that system. Thre is no justification for treating the lower portion of the Red River Levees in any manner different than other portions of the Red River Levee System.

The Red River Valley Association recommends that the Congress of the United States authorize the Corps of Engineers to review the present authorization of these levee systems, with the view of including the lower portions of them in the same MR&T authorizations as the South Bank Levee, so as to provide equal benefits and protection to the people and property in those areas.

RED RIVER MASTER PLAN FOR RECREATION

Recognizing that recreation is an integral component of the Red River Waterway Project, the Association supports the development of recreational facilities as a part of the overall project construction.

A Master Plan for Recreation has been cooperatively developed by the Red River Waterway Comission of Louisiana and the Corps of Engineers. The Red River Valley Association urges approval of the Master Plan by the Chief of Engineers and Secretary of the Army, and encourages and supports the development of recreational facilities in accordance with the plan.

OKLAHOMA RESOLUTIONS

HUGO LAKE, KIAMICHI RIVER, OKLAHOMA

Hugo Lake was authorized by the Flood Control Act of 1946 for the purposes of flood control, water supply, water quality, recreation, and fish and wildlife. Construction began in October 1967, and impoundment of the lake began in January 1974. The damsite is located at river mile 17.6 on the Kiamichi River about 7 miles east of Hugo, Oklahoma.

A study to determine the feasibility of adding hydropower to the existing spillway is being conducted under the authority of Section 216, Public Law 91-611, December 1970. Funds were received in Fiscal Year 1982 to initiate a preliminary study. This report was completed in October 1982 and showed a 1.4 to 1.0 BCR for up to a 15MW hydropower plant. Continuation of feasibility studies was approved in December 1982. The total study is scheduled for completion in Fiscal Year 1985. The Red River Valley Association strongly recommends that the Corps of Engineers receive funds equivalent to their full capability to continue this study at 100% Federal cost.

PINE CREEK LAKE, PINE CREEK, OKLAHOMA

Pine Creek Lake was authorized by the Flood Control Act of 1958 for the purposes of flood control, water supply, water quality, and fish and wildlife. Construction began in February 1963 and the project became operational in June 1969. The damsite is located at river mile 145.3 on the Little River about 5 miles northeast of Wright City, Oklahoma.

A study to determine the feasibility of adding hydropower generation to the existing outlet works is being conducted under the authority of Section 216, Public Law 91-611, December 1970. Funds were received in Fiscal Year 1982 to initiate a preliminary study. This report was submitted in October 1982 and showed a 1.8 to 1.0 BCR for up to a 40MW hydropower plant. The total study is scheduled for completion in Fiscal Year 1985. The Red River Valley Association strongly recommends that the Corps of Engineers receive funds adequate to their full capability to continue this study at 100% Federal cost.

LUKFATA PROJECT, OKLAHOMA

Lukfata Lake on Glover Creek in central McCurtain County in southeastern Oklahoma was authorized by the Flood Control Act of 1958 as a component of the six-reservoir system for flood control in the Little River Basin. All of the reservoirs except Lukfata Lake have been completed. Without the Lukfata project, the system does not function as planned.

In the Energy and Water Development Appropriations Bill of 1982, HR 97-177, 14 July 1981, the committee on appropriations directed the Corps, within the limits of available funds, to study the potential of hydropower generation at Lukfata Lake.

This preliminary study was submitted in May 1983. The study showed that up to a 65MW hydropower plant could be developed as a part of the Project with a 2.0 to 1.0 BCR. Completion of the feasibility report is scheduled for Fiscal Year 1988. The Red River Valley Association strongly recommends that the Corps of Engineers receive funds equivalent to their full capability to continue this study at 100% Federal cost.

RED RIVER AND TRIBUTARIES ABOVE DENISON DAM

The Red River Valley Association, the Oklahoma Water Resources Board, and the City of Chickasha support the current study being conducted by the Corps of Engineers to assess the potential for water resocuces development in south-central and southwestern Oklahoma. The current efforts are concentrated on seeking future water supply alternatives for the Chickasha area. It is anticipated that the reconnaissance study will be completed in FY84 and will identify a federal interest in continuing this study. It is requested that 100% Federal funds be appropriated in FY85 to initiate feasibility studies at the full capability level of the Corps of Engineers.

PARKER LAKE, OKLAHOMA

Parker Lake, on Muddy Boggy Creek, Oklahoma, is an early action project recommended in the Red River Below Denison Dam Comprehensive Basin Study.

The project would provide protection against the standard project flood as well as a dependable water supply of 42 million gallons per day for municipal industrial facilities.The project would have a benefit-to-cost ratio of 1.9 to 1.0.

A report recommending the construction of the project was approved by the Office of the Secretary of the Army and transmitted to the Water Resources Council on 15 January 1981. The report was returned to the Office of the Secretary of the Army in October 1981 as a result of the Water Resources Council being discontinued.

Funding of $100,000 was received for Continuation of Planning and Engineering work on Parker Lake in FY84. Authorization for construction of Parker Lake is pending in 98 HR 3678.

The Red River Valley Association understands that the Oklahoma Water Resources Board has identified Parker Lake as its number one priority in the category of Continuation of Planning and Engineering. The Association requests that Congress authorize Parker Lake and that appropriations be made in FY85 for Continuation of Planning and Engineering at 100% Federal cost for the full capability of the Corps of Engineers.

SARDIS LAKE, OKLAHOMA

Sardis Lake is located at mile 2.8 on Jackfork Creek, a tributary of the Kiamichi River, about 3 miles north of Clayton. The project was authorized by the Flood Control Act of 1962 for the purposes of flood control, water supply and recreation. Construction began in 1975. Impoundment of Jackfork Creek behind the structure occurred with the official gate closing in January 1983. The Dam and Lake were officially dedicated in June 1983.

As authorized the recreation areas at Sardis Lake were to be fully federally funded of which $2,313,000 remains to be appropriated. The FY84 House Energy and Water Development Appropriation Bill called for an addition of $1.0 million at Sardis to allow Federal construction of recreation areas in keeping with the provision of the original authorization and directed the Corps to construct, operate and maintain the recreation areas as authorized. However, the conference report reduced the appropriations to $500,000.

The Red River Valley Association strongly urges Congress to appropriate the remaining funds in accordance with Corps of Engineers full capability to complete the recreation areas at Sardis Lake as originally planned and authorized.

McGEE CREEK LAKE, OKLAHOMA

McGee Creek Lake was authorized for construction, operation, and maintenance in accordance with Federal Reclamation Laws by Public Law 94-123 September 28, 1976. McGee Creek Lake is located in Atoka County in southeastern Oklahoma. McGee Creek is a northern tributary of the Red River. The damsite is about 3.4 miles above the confluence of McGee and Muddy Boggy Creeks. The project was authorized for water supply, flood control, and recreation. Construction began on the project in June 1982.

The FY84 Water and Energy Development Appropriations Bill provided $45,360,000 for the continued construction of the McGee Creek Project, including $5,000,000 for roads associated with the project. The Red River Valley Association strongly supports continuation of this project and the concept demonstrated by the project of maximum development of the local economy by maximum utilization of opportunities provided by the project's development. The Association urges the members of the McGee Creek Authority which are located outside of the Red River Basin to continue to cooperate with the basin interests to fully develop the economic potential of this project to the project area.

The Red River Valley Association requests that Congress appropriate necessary funds to the Bureau of Reclamation to continue the construction of this project in accordance with the Bureau's full capability in FY85.

TEXAS RESOLUTIONS

CYPRESS BASIN

A feasibility study of the Cypress Basin to include an investigation of the proposed Lake Marshall was authorized and funded by Resolution of the committee of Public Works and Transportation, May 9, 1979. The investigation is underway, and sufficient funding is needed to accomplish the study in a timely manner. The Association supports an appropriation of the capability of the Corps of Engineers in this endeavor.

COOPER LAKE AND CHANNELS

The Cooper Lake and Channels project was authorized by the 84th Congress on August 3, 1955 for the construction, control, recreation, and water supply benefits to the citizens of this nation. The Corps of Engineers, with three local entities, Sulphur River Municipal Water Districts, North Texas Municipal Water District and the City of Irving, have been attempting to build this project which is now under a Federal Court injunction for modifications to the Environmental Impact Statement, that was ruled inadequate by William Wayne Justice on December 12, 1978, and again on December 30, 1982.

The Corps of Engineers has made what it considers to be the required modifications on the Cooper Lake Project which is desperately needed by the local participants for water supply and by the City of Texarkana for replacement flood control storage in Lake Wright Patman; therefore, the Red River Valley Association fully supports the Cooper Lake and Channels Project and encourages the Congress, the Corps of Engineers and the Federal Courts to use every effort to have the injunction removed so that the project can continue to completion for the benefit of the area and the nation. Further, the Red River Valley Association urges the Congress to continue funding the project in FY 1985 to let the Court know there is still strong Congressional support.

LAKE WICHITA - HOLLIDAY CREEK - MCGRATH CREEK PROJECT
WICHITA FALLS, TEXAS

The Army Corps of Engineers is currently doing the preliminary design of a new dam to replace the unsafe dam on Lake Wichita, and to widen and realign the channel of Holliday Creek. Additionally, feasibility studies on McGrath Creek have been made by the Corps of Engineers and a tentative plan for flood control has been submitted to the City of Wichita Falls for study. These projects will stop the periodic and frequent flooding that cause millions of dollars damage each year to the largest city on the North Central Texas plains.

Congress has approved funds and the President's Budget calls for $335,000 to continue the preliminary design work; however, final design and construction cannot begin until Congress authorizes the project.

The City of Wichita Falls is one of the few communities that has agreed to pay the non-federal share of the costs for the project, a positive indication of the importance of this project to the citizenry. The City has cleared the existing creek channel and is actively planning the relocation of bridges and utilities to facilitate final construction. The City will also acquire all right-of-way and drainage easements.

The Red River Valley Association strongly encourages the Congress to authorize the Lake Wichita - Holliday Creek - McGrath Creek project. Since final design and construction will require at least six years, the Association urges immediate action so that the project can be completed by 1990.

RED RIVER BANK STABILIZATION ABOVE LAKE TEXOMA

Thousands of acres of America's most productive farm lands along the banks of the Red River and some of its tributaries above Lake Texoma are being destroyed annually. This staggering depletion of the nation's most fertile lands caused by bank caving can be stopped by a systematic program of stream bank stabilization.

The Red River Valley Association urges Congress to provide the necessary authority and funding appropriations to the Corps of Engineers to enable the Corps to move forward on this most vital program of bank stabilization above Lake Texoma.

BIG PINE LAKE, TEXAS

The Big Pine Lake, Texas, project was authorized by the Flood Control Act of 1962. The project is ready for construction and the completed preconstruction planning work has provided for a balance of environmental preservation with economic development among the project's water supply, flood control, recreation, and fish and wildlife purposes. The supply of water from this project is necessary and essential to the life and livelihood of every citizen of our area. The Association urges swift approval of the preconstruction plan so that work may proceed on this important project.

RED RIVER ABOVE DENISON-PEASE RIVER-CROWELL SITE

A more detailed feasibility report must be prepared on the proposed Crowell Site on the main stem of the Pease River, to take into account more realistic values of all benefits. This investigation should be started at once as this part of the Red River Basin is particularly short of usable water for municipal, industrial and agricultural uses. Additionally, this reservoir would be very valuable as a flood control project.

Within a few years, with the control of natural pollution as proposed by the Corps of Army Engineers in the Ark-Red Chloride Control Program, this water can be used for irrigation purposes and other purposes mentioned above, and it is now time that the necessary report and feasibility study on this proposed site be started.

This proposed project has been endorsed and is supported by Wilbarger, Foard, Hardeman, Cottle and Childress Counties, and Soil Conservation District serving the above counties and the Cities of Vernon, Quanah, Childress, Crowell, ad Paducah; and the Four Winds Foundation, consisting of Childress, Cottle, Hardeman, and Foard Counties, and Four Winds RD&D and many farm and civic organizations. The Red River Valley Association supports the Pease River Reservoir Steering Committee in its request, and urges the Corps of Engineers to expedite its efforts to develop a plan of improvement for the area.

RED RIVER VALLEY ASSOCIATION
LIST OF THOSE ATTENDING HEARINGS

Mr. Gary Ainsworth McGee Creek Rural Demo Project 211 E. Court Atoka, Ok 74525	RRVA
Mr. R. C. Atkins P. O. Box 5259 Bossier City, LA 71111	Bossier Levee Board
Mr. & Mrs. Douglas F. Attaway 957 Sheridan Shreveport, LA 71104	Red River Waterway Comm. RRVA
Mr. Harry Bean Greater Texoma Municipal Utility Dist 5100 Airport Drive Denison, TX 75020	RRVA
Mr. Richard Bennett Dept. of Transportation & Development P. O. Box 44155 Capitol Station Baton Rouge, LA 70804	Office of Public Works State of Louisiana
Mr. Harvey Bollinger RedArk Development Authority First National Center, Suite 103 P. O. Box 1650 McAlester, OK 74501	RRVA Board

Mr. Gordon Boogearts P. O. Box 94 Shreveport, LA 71161	RRVA, Enterprise Chapter (Young group)
Mr. Bill Brooks 4475 Choctaw Lane Paris, TX 75460	Red River Auth of Tx RRVA
Mr. & Mrs. Norman Budd (Phyllis) P. O. Box 5592 Alexandria, LA 71301	RRVA Board Red River Waterway Comm
Mr. Dewey Burchett, Jr. P. O. Box 5259 Bossier City, LA 71111	Bossier Levee Board
Mr. Syd Burt, Jr. P. O. Box 5259 Bossier City, LA 71111	Bossier Levee Board
Mr. Bill Chapman Attorney at Law P. O. Box 1425 Ardmore, OK 73401	RRVA Board
Mr. Jerry Chapman Greater Texoma Municipal Utility Dist 5100 Airport Drive Denison, TX 75020	RRVA
Mrs. Coy Cooper P. O. Box 5259 Bossier City, La 71111	Bossier Levee Board
Mr. J. Alfred DeGueurce P. O. Box 5259 Bossier City, LA 71111	Bossier Levee Board President
Mr. Don Duggan P. O. Box 7333 Shreveport, LA 71107	Caddo Levee Board, Pres. RRVA, Chairman
Mr. Paul Demopulos Demopulos & Ferguson Petroleum Tower Shreveport, LA 71101	RRVA, Enterprise Chapter (Young group)
Mr. Bruce Easterly P. O. Box 38 Shreveport, LA 71161	Office of Public Works State of Louisiana
Mr. Vincent Foster P. O. Box 278 Hope, Ark 72801	RRVA Board
Mr. Harry Friedman P. O. Box 818 Natchitoches, LA 71457	Red River Waterway Comm.
Mr. Dick Gibson P. O. Box 468 Coushatta, LA 71019	Red River Waterway Comm.

Mr. Austin Guest P. O. Box 817 Guest Building Clarksville, TX 75426	RRVA Board
Lt. Gen. Edgar S. Harris, Jr. Red River Valley Assoc. P. O. Box 709 Shreveport, LA 71162	RRVA, President
Mr. Randall Johnston P. O. Box 57 Bunkie, LA 71322	Red River Waterway Comm.
Mr. Glenn Jones Red River Parish Police Jury P. O. Box 709 Coushatta, LA 71019	RRVA
Mr. Ben Littlepage Rt. 2, Box 8 Colfax, LA 71417	Red River Waterway Comm. RRVA Board
Mr. Dan Logan, Jr. P. O. Box 1402 Shreveort, LA 71164	Bossier Levee Board
Mr. Lynn Lowe 25 Arnold Drive Texarkana, Ark 75502	RRVA Board Red River Auth of Texas
Mr. James Meyer Meyer, Meyer, LaCroix & Hixson, Inc. P. O. Drawer 5444 Alexandria, LA 71301	RRVA
Mr. John Mosley 5100 Airport Drive Denison, TX 75020	RRVA
Mr. L. V. Myles 5938 Ledbetter Shreveport, LA 71108	Red River Waterway Comm.
Mr. Roy Pilkinton P. O. Box 5259 Bossier City, LA 71111	Bossier Levee Bd
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Mr. Robert Smith Office of Public Works Alexandria, LA	Office of Public Works State of Louisiana
Mr. Don Sonnier 2314 Melrose Avenue Bossier City, LA 71111	Red River Waterway Comm. RRVA
Mr. John Stroud Attorney at Law State Line Plaza, Suite 6 Texarkana, Ark 75502	RRVA Board Red River Commission
Mr. Homer Tanner P. O. Box 680 Daingerfield, TX 75638	RRVA Board, V.P., TX. Northeast Texas Municipal Water Dist.
Mr. Tommy Taylor P. O. Box 5259 Bossier City, LA 71111	Bossier Levee Board
Mr. Chester Wells P. O. Box 8235 Alexandria, LA 71306	RRVA Board Red River Waterway Comm. Red River, Atchaf. & Bayou Boeuf Levee Dist
Mr. Jack Williams W Bar Ranch P. O. Box 158 Garland City, Ark 71839	RRVA Board, V.P., Ark.
Ms. Margeret Bollinger P. O. Box 596 Broken Bow, OK 74728	Vice President, American State Bank
A. A. Sewell Ervin Route Hugo, OK 74743	Kiamichi Economic Development District

STATEMENT OF THE TEXAS DEPARTMENT OF WATER RESOURCES

The Texas Department of Water Resources respectfully submits project testimony regarding Corps of Engineers projects located in the Red and Sulphur River Basins and Cypress Creek Basin of the State of Texas.

Responsibility for Statewide planning and development of water resources rests with the Texas Department of Water Resources. The Department has been designated as the State agency to cooperate with appropriate agencies of the Federal government and with other State and local agencies in matters relating to water resource development. In order to assure orderly development of the State's water resources, the Department has formulated and adopted a comprehensive Statewide "Texas Water Plan", which under Texas statutes serves as a flexible guide for present and future water development in Texas.

The plan indicates the need for specific projects, including alternatives, to meet the State's water needs and to provide National, State, and regional economic growth and stability. The Department of Water Resources maintains a continuing planning program in order to address changing economic, social, hydrologic, and environmental conditions in the State. The projects included in this statement are considered as integral elements in the State's present and future water resource development program.

RED RIVER BASIN CHLORIDE CONTROL PROJECT

The Red River Basin Chloride Control project, directed toward the improvement and preservation of water quality in the states of Texas, Oklahoma, Louisiana and Arkansas is imperative in order to realize full utilization of these surface-water supplies. Presently, more than 1,000 miles of streams in the river basin are severely contaminated by natural brines. Consequently, waters of the streams are not suitable for municipal and most industrial and agricultural purposes. Large volumes of salt enter the streams from 15 natural sources, 10 of which are located in Texas. There exists an immediate need for good quality water within and to the west of the areas of natural salt pollution, as well as a long-term need downstream in the eastern part of the Red River Basin.

Passage of the 1966 and 1970 Flood Control Acts (P.L. 89-789 and P.L. 91-611) authorized construction of measures to control the natural salt pollution from Areas VI, VII, VIII, IX, X, XIII, XIV, and XV in the basin, subject to the provision that construction on the project could not be started until approved by the Secretary of the Army. Initiation of construction on Area VIII on the Wichita River prior to the required approval by the Secretary of the Army, was authorized by the 1974 Water Resources Act. Construction on Area VIII, which includes the Truscott Brine Lake, was begun in February 1977 and is nearing completion. With the exception of Area VIII, construction on the remaining seven areas and two brine lakes of the Red River Chloride Control project is awaiting approval by the Secretary. It is our understanding the Secretary is delaying approval pending a commitment of up-front financing from the states involved in the overall project.

Congress authorized construction of the entire Red River Chloride Control project to control natural brine sources as a 100 percent federal project (P.L. 89-789 and P.L. 91-611). Subsequently, the components of the overall project were re-evaluated by the Corps of Engineers, at the request of Congress, and the results of the re-evaluation have been reported in the Corps' "Supplemental Data to Arkansas-Red River Basin Chloride Control, Red River Basin Design Memorandum No. 25, General Design, Phase I-Plan Formulation", Vols. I and II, Department of the Army, Tulsa District Corps of Engineers, Oklahoma, November 1980. The re-evaluation reaffirmed both the economic and technical feasibility of this project. According to our information, the Secretary of the Army has not reached the necessary decisions regarding this project and has not forwarded the findings and project reaffirmation onward for ultimate Congressional action.

We urge strongly that Congress request the Secretary of the Army to forward the report and his recommendation on this project to the Office of Management and Budget, in accordance with the provisions of the project's authorizing legislation.

LAKE WICHITA, HOLIDAY CREEK

Lake Wichita was constructed on Holiday Creek by the City of Wichita Falls, Texas, in 1901. The dam and spillway, which provides partial flood protection for highly developed urban areas of the City of Wichita Falls, has deteriorated badly and the spillway capacity is inadequate to handle floods which occur in the Holiday Creek watershed. Further, the dam has been assigned a high hazard classification by the Corps under the National Dam Safety Program and has been declared unsafe by both the Corps and the State of Texas. In response to Congressional resolution and studies authorized by the Chief of Engineers, the Corps has completed studies and has recommended a plan to meet the flood control needs of the area which includes replacement of the existing Lake Wichita Dam and enlargement of the channel downstream of the dam. The City of Wichita Falls strongly supports the project and will assume all non-federal responsibilities.

The President's budget recommends $340,000 be provided for the Lake Wichita--Holiday Creek project during FY 1985. The Department strongly supports appropriation to the full extent of the President's budget for FY 1985.

RED RIVER BELOW DENISON DAM, LOUISIANA, ARKANSAS, OKLAHOMA, TEXAS

A total of $335,000 is included in the President's FY 85 budget to continue planning studies for channel realignment and bank stabilization below Denison Dam. The Department supports the President's recommendation for funding in FY 85.

RED RIVER AND TRIBUTARIES ABOVE DENISON DAM

The President's budget recommends $100,000 be provided during FY 85 to continue flood damage prevention studies in the Red River Basin above Denison Dam. The Department supports the President's recommendation for funding in FY 85.

COOPER LAKE AND CHANNELS, TEXAS

The Cooper Lake and Channels Project, located in the Sulphur River Basin upstream of Lake Wright Patman in the State of Texas, was authorized by Public Law 218 of the 84th Congress. In addition to providing 273,000 acre-feet of water conservation storage space, the reservoir will allow sufficient storage for basin-wide flood protection to convert 120,000 acre-feet of flood control space in Lake Wright Patman into water supply storage for the Texarkana water demand area.

The Department of Water Resources appreciates the consideration the committee has allowed the project in the past. Cooper Lake and Channels has been subjected to lengthy delays, due in large part in recent years to litigation under the National Environmental Policy Act and subsequent alleged inadequacies in the Environmental Impact Statement. The Corps of Engineers completed a Supplemental Environmental Impact Statement in October, 1980 and a final supplemental EIS was filed with the Environmental Protection Agency on March 27, 1981. The recommended plan incorporates all means to avoid, minimize, or compensate for environmental harm. Completion of Cooper Lake is essential to meet existing and future water needs of the Sulphur River Municipal Water District, City of Irving, Texas, and the North Texas Municipal Water District. The North Texas Municipal Water District membership is eleven cities in the rapidly-expanding urban area of more than 530,000 residents in a 1,600 square-mile area to the north and east of Dallas, and also serves 44 other entities, including 17 customer cities, rural water supply corporations, and municipaltility districts in the region. The District faces serious, short-term water supply problems unless construction of Cooper Lake is reinitiated, since its total water supply is currently provided by one reservoir - Lake Lavon. This is considered one of the most critical water supply problems in Texas.

The benefits to be gained from construction of the Cooper Lake and Channels Project substantially exceed the adverse effects. This project is one of the most urgently-needed water resource projects in Texas. The Department strongly urges the Committee to continue support for this very important project while legal problems are being resolved. No funds are being requested for FY 1985, but it is hoped that construction can be resumed in FY 1985.

LITTLE CYPRESS CREEK

A study of the feasibility of improvements for flood control, water-conservation, and other water-related purposes in the Cypress Creek Basin was undertaken by the Corps of Engineers in October, 1979 pursuant to a resolution adopted May 9, 1979 by the Committee on Public Works and Transportation, U.S. House of Representatives. This area of northeast Texas is undergoing significant growth due to development and utilization of lignite resources within the area. The occurrence of economically recoverable lignite reserves in the region has delayed construction of at least one major Corps of Engineers reservoir project in the area, thus seriously affecting the availability of firm water supplies for this region.

The current feasibility study is expected to require additional time for completion. The President's budget recommends $300,000 be appropriated for this study in FY 1985. The Department supports this request and urges that the Committee appropriate the amount of the President's budget for FY 1985 for this project.

RED RIVER WATERWAY PROJECT

The Rivers and Harbors Act of 1968 authorized the Red River Waterway Project featuring a navigation channel from the Mississippi River to Shreveport, Louisiana, and Daingerfield, Texas, and stabilization of the banks of the Red River from the Mississippi River to Shreveport, Louisiana; Shreveport, Louisiana to Daingerfield, Texas; Shreveport, Louisiana to Index, Arkansas, and vicinity of Index, Arkansas to Denison Dam, Texas. Construction under this authorization has been initiated in the Mississippi River to Shreveport, Louisiana Reach.

Completion of the Red River Waterway will significantly boost the economy throughout the river basin and reduce widespread unemployment of the area. Therefore, the Department supports the re-iniation of preconstruction planning of the waterway segment from Shreveport, Louisiana to Daingerfield, Texas and urges the Committee to appropriate $100,000 for this purpose in FY 1985.

OPERATION AND MAINTENANCE OF EXISTING PROJECTS

The Department supports appropriations to the Corps of Engineers for operation and maintenance of the following projects during FY 1985. Arkansas-Red River Basin Chloride Control, Area VIII ($373,000); Denison Dam, Lake Texoma ($4,044,000); Ferrells Bridge Dam-Lake O' the Pines ($1,433,000); Lake Kemp ($145,000); Pat Mayse Lake ($728,000); and Wright Patman Lake ($1,239,000).

The Texas Department of Water Resources requests Committee support of the Red and Sulphur River Basin and Cypress Creek Basin water resource development efforts. The Department most respectfully urges funds as requested in order to accomplish the coordinated, orderly development of vitally-needed water resource projects in the Red and Sulphur River Basins and the Cypress Creek Basin in the State of Texas.

STATEMENT OF ALFRED DEGUEURCE, PRESIDENT, BOSSIER (LA.) LEVEE DISTRICT

This statement is presented in behalf of the Board of Commissioners of the Bossier Levee District and the citizens of Bossier and Red River Parishes, Louisiana, to urgently request adequate funding for the Bayou Bodcau and Tributaries Project for Fiscal Year 1984.

Congress, in 1956, authorized the study of the Bayou Bodcau and Tributaries Project in Bossier and Red River Parishes. In 1965, after nine years of studies and delays and after a well justified plan of improvement was developed, the project was finally authorized for construction. In 1974, after another nine years of delays, studies and preconstruction planning, construction was finally begun, and the project was progressing satisfactorily.

Then in March, 1977, this project along with many other water resource projects throughout the Nation, was reviewed by the Department of the Army at the request of the President, under new criteria for environmental, economic, safety and other factors. Although many other projects failed, this project passed all tests under the new review criteria; however, a study team, appointed by the President, arbitrarily decided that annual benefits in excess of project costs, were not adequate to offset the adverse environmental effects, and it was recommended that the project be terminated. Congress subsequently passed legislation modifying the project and eliminating those project features providing the greatest benefits to the people of the area.

At the time the project was delayed, the levee portion of the Bayou Bodcau and Tributaries Project was approximately 30% complete and no channel improvement work had been accomplished. The State of Louisiana, the Bossier Levee District, and other government agencies within the levee district began construction on the channel feature of the project in 1981. Since the initiation of the channel project, over $4,000,000 has been spent to complete the channel features. The State of Louisiana and the interested local agencies in Bossier and Red River Parishes realize the importance of this project and have spent local funds to construct the channel portion of this project.

The Bayou Bodcau and Tributaries Project is a complex project for the solution of complex and interrelated drainage and flood control problems. Both levee construction and channel improvement work are project features each of which depends on the other for successful operation of the overall project. The Sponsors of this project cannot complete this very important project without Federal participation as their funds are committed to the extreme limits presently and in the future.

In Fiscal year 1982, Congress passed legislation mandating the Bayou Bodcau and Tributaries Project be constructed as originally authorized. However, since the projects authorization in 1965, land use changes have occurred within the project limits, especially south of Bossier City. Some lands that were predominately agricultural are now being used for residential development. The U. S. Army Corps of Engineers have informed the local sponsor that some 5,000 acres of flood easements will have to be obtained south of Bossier City, some of which contain substantial residential development. The flood easements south of Bossier City were not included in the project as authorized and it is presumed that the authorized project intended to protect all lands subject to flood below Bossier City. Because of the land use changes, the U. S. Army Corps of Engineers has recommended that a comprehensive review of the remainder of the Project be undertaken which is scheduled to be completed in March, 1985, another lengthy delay to the timely completion of this project.

We are therefore urging that Congress fund the Bodcau and Tributaries Project at the maximum capability of the Corps of Engineers and that Congress urge the Corps of Engineers to complete the comprehensive review of the project in a timely manner so as project completion can be achieved at the earliest possible date.

STATEMENT OF THE CADDO-BOSSIER PORT COMMISSION

The members of the Caddo-Bossier Port Commission add our wholehearted support and endorsement of the Red River Valley Association's Program of Work for Fiscal Year 1985, and respectfully request that the sub-Committees on Appropriations submit to the full Senate and House of Representatives a recommended appropriation reflective of the amounts requested by the Association for the various projects cited in their Program of Work.

This request is made by the Caddo-Bossier Port Commission based upon the numerous overall benefits which will accrue to Northwest Louisiana, Northeast Texas and Southwest Arkansas from the completion of the Red River Waterway project -- namely, navigation to the Shreveport-Bossier City, Louisiana area (of which we are particularly interested), improved availability of clean, potable water, the potential for hydro-electric power generation, improved recreational facilities and, perhaps most important, the number of construction and permanent jobs continuation of this project will create.

The members of the Caddo-Bossier Port Commission fully realize that our nation faces urgent economic problems, and that funding for all programs must be designed with certain constraints in order to develop a federal budget with the lowest possible deficit. At the same time, the Port Commission members believe the Red River Valley Association has requested funding which meets this criteria, and therefore, we urge you to give serious consideration to providing the funding level requested by the Association in its Program of Work.

Our main concern is with the continued funding to enable navigation on the Red River to the Shreveport-Bossier City area as rapidly as possible. This concern is generated by the specific benefits we know will accrue to the citizens of Northwest Louisiana, Northeast Texas and Southwest Arkansas with the availability of a public port facility to handle water borne commerce from this area to ports throughout our nation and the world. We have taken the liberty of attaching information which briefly outlines these benefits, and hope you will consider these factors as you develop your recommendations for funding appropriations for the Red River projects.

SPECIFIC BENEFITS
ACCURING TO
NORTHWEST LOUISIANA, NORTHEAST TEXAS AND SOUTHWEST ARKANSAS
BY THE AVAILABILITY OF
PUBLIC PORT FACILITIES AND ACCOMPANING INDUSTRIAL PARK

(The following information was derived from information contained in a Feasibility Study prepared for the Caddo-Bossier Parishes Port Commission by Tippett-Abbett-McCarthy-Stratton in 1976 and from an updated Port Users Survey prepared by Griswold Engineering Co. in 1981.)

I. Potential Tributary Area

A. Boundary Limits
  1. 60 miles to east of Shreveport-Bossier City (Ouachita River)
  2. 110 miles to north (existing inland waterway on Arkansas-Verdigris River system)
  3. 70 miles to south (proposed Alexandria, LA port)
  4. 220 miles to west (Dallas-Ft. Worth area)

B. Demographics
  1. Land Mass
    a) 39,000 miles
    b) 53 counties and parishes, including 36 counties in Texas, 9 parishes in Louisiana, 5 counties in Arkansas and 3 counties in Oklahoma.
  2. Population -- 3.7 million in 1970

  3. Total employment of area
    a) Approximately 326,000 in 1972
    b) 6,000 manufacturing establishments in tributary area in 1972; more than 1/3 have 20 or more employees
    c) Shipment of goods by these manufacturers were worth more than $12.1 billion, including more than $5.7 billion in value added.

II. Potential Tonnage through Public Port by 1990 (if Red River Waterway completed)

A. TAMS 1976 Feasibility Study
  1. 789,000 tons of general cargo. (Total firms contacted: 1,859; responses from 358) (Public Terminal)
  2. 1,567,500 tons (Private Terminals)

B. Griswold 1981 Port Users Survey
  1. 1,890,350 tons of general cargo (Total firms contacted: 217; responses from 65) (Public Terminal)
  2. 1,641,418 tons (Private Terminals)

III. Direct Economic Benefits to Area

A. Transportation Savings for Shippers or Consignees. (Availability of water transport would be expected to force a reduction of costs of other modes of transporation.)
B. New Income
  1. Revenue generated by services and materials, including terminal operating charges, port and local freight charges, bunkering and miscellaneous vessel supplies.
  2. Creation of a possible 4,000 new jobs by the time a 1,500 acre industrial park is fully occupied.
  3. Total direct benefits of from $4 million to a possible $6.9 million in 1995.
  4. Multiplier effect -- each new dollar would generate $2.50 total new money, resulting in total annual direct and indirect monetary benefits of $16 million by 1995.

IV. Importance of Port/Industrial Park to Area

A. New jobs for growing work force.

B. Direct and indirect new income would enhance tax bases of area's communities and state treasuries.

EASTERN OKLAHOMA WATER PROJECTS

STATEMENT OF HARVEY BOLLINGER, DIRECTOR, REDARK DEVELOPMENT AUTHORITY

Senator COCHRAN. I would like to ask the hearing to please return to order. We have one other presentation to hear today before we adjourn.

We would like to call on Mr. Harvey Bollinger, who has already testified as a part of the previous panel, but who is also here representing the RedArk Development Authority.

Mr. Bollinger, we have a copy of your testimony concerning this project. I want you to know that we will carefully consider it. I would encourage you to submit it for the record and make a few brief comments since we are out of time. I don't know what you have to do, but I am supposed to be somewhere else.

This won't in any way reflect adversely on the project if you summarize some of this testimony.

You may proceed. We are glad you are here.

Mr. BOLLINGER. Thank you, Mr. Chairman. I will make my remarks brief.

Senator COCHRAN. As a matter of fact, it might even help the project. [Laughter.]

Mr. BOLLINGER. I understand.

I want to express our appreciation for this opportunity to meet with the committee and discuss what we consider the most crucial question facing our Nation, and that is how do we develop our Nation's water resource.

I am executive director of the RedArk Development Authority, which is a public trust established under the laws of the State of Oklahoma for a 21-county area, roughly a quarter of the State of Oklahoma.

In our role as a planning and implementing authority, RedArk works closely with three citizens water associations in our area: the Central Water Association, the Poteau/Deep Fork Association, and the Oklahoma delegation of the Red River Valley Association. With me today are representatives from each of these three water associations.

By the way, this is the first time this group has appeared before this committee. I would like for the RedArk group to stand at this time and be recognized.

[Applause; group standing.]

Mr. BOLLINGER. As you have mentioned, we have submitted written testimony, and I will just quickly summarize a few of the important points on those testimonies.

NEED FOR WATER RESOURCE AUTHORIZATION LEGISLATION

One thing that I would like to go on record as supporting is that our group does support the passage in fiscal year 1985 of an omnibus water legislation. In fact, we would like to encourage this committee upon passage of some omnibus bill to pass a supplemental appropriations bill which can enact the projects established as new starts by that bill.

We also want to applaud the committee for its position and we request that you continue to appropriate funds based only on congressional-adopted cost-sharing policies.

In areas of planning assistance to States and technical assistance to States, we would request that $200,000 be provided for the State of Oklahoma through the Corps of Engineers and that the Bureau of Reclamation's budget request be provided.

In the area of water treatment and transmission, there is language in the authorizing bill which has been mentioned before this committee this morning that provides authorization for additional water treatment and transmission as part of the Parker Lake project. We would request when this authorization bill is passed that $88.6 million be appropriated as requested on a timetable by the Corps of Engineers for this particular project.

We would also request that as included in the omnibus bill, there is language which will provide for economic development funding through the Corps and the Bureau for entities other than Federal entities to provide for economic development as part of our projects, that a supplemental appropriations bill include appropriations for that purpose.

PARKER LAKE, OKLA.

With regard to Parker Lake, we would request that the Corps full capability, which I understand to be $750,000 for continuation of planning and engineering, be provided at 100-percent Federal cost next year.

I would like to bring to the attention of this committee this particular project already has 10 times the water rights requested in our State than the project will provide. So, it is obvious that this is a much-needed project, and funding at the full capability for the CP&E category will speed the project up by 2 years.

The east-central Oklahoma water study, we would request that the Bureau be initiated $200,000 in fiscal year 1985 for this study at 100-percent Federal cost for a project entitled, "South-Central/Southeast Oklahoma Comprehensive Study." We would request full capability for the feasibility study at 100-percent Federal cost. I understand that to be stated at $100,000.

Arcadia Lake, Okla., we would request the Corps full capability for continued construction and the addition of $9.6 million for treatment and transmission facilities be provided.

Canadian River and tributaries project, we would request full Corps capability, $250,000, again providing this project at 100-percent Federal cost.

Red River basin comprehensive study, again we would request full capability as expressed by the Corps of Engineers, $200,000, be provided this year.

Sardis Lake, Okla., this particular project is nearing completion. The only items remaining are recreation, similar to those brought to your attention earlier today. This approximately $2.3 million was originally set aside for recreation facilities when this project was set up by Mr. Gianelli. We would request the Corps be requested to provide this $2.3 million at 100-percent Federal cost as originally planned and authorized for this project.

The last project I would like to bring to your attention is McGee Creek Lake in Oklahoma. We would request the full Bureau capability to continue construction on this particular project.

Again, we appreciate the opportunity to appear before you and hope to do this again in the years to come. Thank you.

Senator COCHRAN. We appreciate your being here. Those of your group who have accompanied you, we appreciate your attendance, too.

We will carefully look at these requests, particularly those requests for funding of projects that have been authorized, and those comments that you made about policy and the Reauthorization Act, we appreciate having your views on that. That doesn't all come within the jurisdiction of this subcommittee, as you fully well know, but nonetheless, it will be helpful to us as we approach the discussion of that legislation on the floor of the Senate as it is reported out of the other committees, the legislative committee.

Thanks a lot for being here. We appreciate your cooperation with the committee. We hope you have a good, safe trip back to Oklahoma.

Mr. BOLLINGER. Thank you.

[The statement follows:]

Statement of the RedArk Development Authority, East Central Water Association, Poteau/Deep Fork Association, and the Oklahoma Delegation—Red River Valley Association

TESTIMONY SUMMARY

	Project	Required Action by Committee
1.	Omnibus Water Legislation	Enact a supplemental appropriations bill with passage of omnibus bill.
2.	Local Cost Sharing	Continue to appropriate funds based only on Congressional adopted cost-sharing policies.
3.	Planning Asst./Technical Asst.	$200,000 for Corps for Oklahoma Budget request for Bureau for Oklahoma
4.	Water Supply Storage, Treatment and Transmission	Fund $88,636,000 for Parker Lake upon passage of pending authorization bill.
5.	Economic Development	Include in a supplemental appropriations bill with passage of omnibus bill.
6.	Parker Lake, Oklahoma	Full Corps capability ($750,000) for Continuation of Planning and Engineering at 100% Federal cost.
7.	East Central Oklahoma Water Supply Study	$200,000 for Bureau to initiate in FY85 at 100% Federal cost.
8.	South Central / Southeast Oklahoma Comprehensive Study	Full Corps capability ($100,000) for feasibility study at 100% Federal cost.
9.	Arcadia Lake, Oklahoma	Full Corps capability for continued construction and addition of $9.6 million for treatment and transmission facility.
10.	Canadian River & Tributaries	Full Corps capability ($250,000) at 100% Federal cost.
11.	Red River Basin Comprehensive Study	Full Corps capability for feasibility study at 100% Federal cost.
12.	Sardis Lake, Oklahoma	Full Corps capability toward remaining $2,313,000 for funding of recreation facilities at 100% Federal cost and as originally planned and authorized.
13.	McGee Creek Lake, Oklahoma	Full Bureau capability to continue construction.

REDARK DEVELOPMENT AUTHORITY TESTIMONY

Mr. Chairman, I want to express our appreciation for this opportunity to meet with this Committee to discuss what we consider the most crucial question facing our nation, "How do we develop our nation's water resources in order to avoid a national water crisis?" We consider it an honor and a privilege to testify before this Committee because we feel that without a strong multi-purpose national water development program, many of the other important aspects of our country's future, including the nation's defense program are really being built on a very unstable foundation; we also consider it a responsibility to work with you and the Committee.

The RedArk Development Authority (RedArk) is a public trust established under the laws of the State of Oklahoma for a 21-county area of east central and southeast Oklahoma. The name RedArk is derived from the fact that the area lies immediately between two major water resources, the Red and Arkansas Rivers. The purpose of RedArk is to undertake the maximum potential development of the area's water and natural resources with the objective of obtaining the maximum potential economic and employment benefits for the people of that area. With this purpose in mind, RedArk is vitally concerned with the development of not only what we consider our area's most vital resource, but also the most vital resource of our great nation--WATER.

East central and southeastern Oklahoma is rich in water and natural resources, but this area of Oklahoma has lagged far behind the state and the nation in capitalizing on the untapped potential of its natural resource base. The economic and job development potential of these resources has not as yet been of significant benefit to the people of the project area.

When one looks at the RedArk area and the poor economic and employment conditions that exist, and yet realizes the area is rich in water and natural resources, one has to come to the conclusion that there is no justifiable reason for the situation to exist. It is a realization of this untapped potential that makes it not only a privilege for us to appear before you to testify about water development in this area, but it actually becomes a mandate for us to do so.

To achieve its principal purpose, RedArk has initiated a comprehensive, multipurpose water resource development program. This program includes hydropower development, water supply, recreation, navigation, flood control and water quality activities. In our role as a planning and implementing authority, RedArk works closely with the three citizen water associations in our area: East Central Water Association, Poteau/Deep Fork Association, Oklahoma Delegation--Red River Valley Association.

With me today are representatives from each of these three water associations. However, before I turn to them to make short comments about specific projects for their individual areas, I would like to draw your attention to certain items that are of general importance to the entire RedArk area.

OMNIBUS WATER LEGISLATION

The RedArk Development Authority, along with the previously mentioned three water associations, strongly urges the U.S. Senate and House of Representatives to approve Omnibus Water Legislation that would benefit the nation through the proper development and management of the water resources of America. We urge the Congress to give prompt and favorable consideration to an Omnibus Water Bill so that it may be passed and placed into law during FY85. We would also request that once this has occurred, that the Energy and Water Development Appropriations Subcommittees of both the Senate and the House enact a Supplemental Appropriations Bill for FY85 to implement those projects authorized by the Omnibus Bill.

LOCAL COST SHARING

RedArk and the Associations want to applaud this Committee's position on cost sharing. Your refusal to restrict funding from projects which have not agreed to local cost-sharing policies as directed by the current Administration as well as your refusal to assign a higher priority to any projects which have agreed to such cost-sharing policies is strongly supported. We concur in your position that until the full Congress has adopted a cost-sharing policy for the nation, that it is inappropriate to drastically alter the water policy of this nation in an appropriations bill.

We also want to go on record as being vitally concerned about the policies being implemented by the Administration through the Bureau and the Corps without approval of Congress. Policies such as those put forth in what is referred to as the Administration's "Dear Paul" letter appear to be designed not to lead us toward a unified national water development policy, but on the other hand to lead us toward polarization of the development of our nation's great water resources. It is not a program built on projects that are based on need and benefit, but rather appears to be a program which will favor projects which have money over those projects which do not, no matter what the need or the benefit to the nation is.

PLANNING ASSISTANCE TO STATES / TECHNICAL ASSISTANCE TO STATES

Planning assistance to states funding is provided to the Corps of Engineers for them to assist state entities in developing water plans. A similar program, technical assistance to states, is a service provided by the Bureau of Reclamation. We strongly support full funding of these programs to the State of Oklahoma. We feel the state has made very good use of these funds in the past and has applied them in a very excellent extent in assisting in the overall development of the water resources of the state. Section 22(a) of the Water Resource Development Act of 1976 (PL93-251) currently places a ceiling of $200,000 on appropriations to any single state under the planning assistance to states program. We therefore request that this Committee include in the FY85 Appropriations Bill the full $200,000 for the State of Oklahoma. We would also request that the Committee include full funding requests as submitted by the Bureau for technical assistance funds to be used for the State of Oklahoma.

WATER SUPPLY STORAGE, TREATMENT AND TRANSMISSION

The Water Supply Act of 1958 directed the federal water agencies to provide municipal and industrial water supplies to those areas that needed such. While we feel the federal water agencies have done an outstanding job inproviding water storage, they have not fulfilled the full requirement of providing water supply. Because areas in need of municipal and industrial water supplies need more than simply raw water, they need treated water at a point accessible to meeting the needs.

Although we feel that the authority currently exists for federal agencies to include water treatment and transmission facilities as part of their construction plans for lakes authorized to include water supply, any question about this authority would be eliminated by passage of the Roe Omnibus Water Bill (98-HR3678). This Bill establishes specific criteria for the cost-sharing relationships between the non-federal and federal entities regarding water treatment and transmission facilities. We strongly support the policies of the Roe Bill.

However, since we feel that the authority already exists, we would urge this Committee to appropriate funds in FY85 for inclusion of treatment and transmission facilities at Arcadia Lake, a Corps of Engineers project currently under construction. The specifics of this project will be elaborated on by a following speaker. The authorization pending in HR3678 would also authorize and direct the construction of treatment and transmission facilities be added as a part of Parker Lake Project at a cost not to exceed $88,636,000. On passage of this authorization, we would request this Committee appropriate funds to initiate the project along with the construction of the lake itself.

ECONOMIC DEVELOPMENT

Mr. Chairman, as you are aware, the economic benefit resulting from the development of water resource projects is a prime factor in the evaluation process which determines whether these projects should or should not be constructed. When we begin to look at the projects across the nation to evaluate whether we are really achieving these benefits, we find mixed conclusions. In some cases, we are not only achieving anticipated benefits, but even greater ones. However, in other parts of the country, benefits received have fallen far short of the potential which could have been achieved. If we look further at these areas, we find that in most cases they are areas which have chronically exhibited an under-developed economic base and a lack of development capital. We are not receiving the full return potential on our investment in many cases because we have not been willing to make the total investment which is necessary to cause that return. In other words, we have done only part of the job necessary to guarantee the return.

In order to receive this full return potential, we need to establish a comprehensive economic development plan that draws on an area's total natural resources, that leverages on the federal investment in the water projects, and allows for the full economic potential to be achieved from that federal investment. Language included in 98HR3678 will authorize the Corps of Engineers to contract with existing, non-profit economic development organizations to assist in the preparation of projects and to undertake such actions as may be necessary to identify and stimulate the long-term economic development envisioned as a result of the projects which serve remote rural areas or in areas where such are justified because of economic reasons. Similar language is being included in authorizing documents for the Bureau of Reclamation. We urge this Committee, upon passage of these authorizations, to provide full funding of these activities as a part of a Supplemental Appropriations Bill.

EAST CENTRAL WATER ASSOCIATION TESTIMONY

The East Central Water Association is a voluntary group of citizens banded together in the interest of supporting water development projects and other natural resource development in the east central counties of Oklahoma. The ECWA promotes the orderly development of area water and natural resources to advance the economic development and future well being of the citizens of a five-county area. These Oklahoma counties are: Coal, Hughes, Pontotoc, Pottawatomie and Seminole.

The five counties which comprise the ECWA have a combined population as of the 1980 census of approximately 134,000. This five-county area is the most rapidly growing area in southeastern Oklahoma. It is an area which is not only experiencing significant population growth, but also major expansion in the manufacturing and industrial sectors. Cities in these east central counties, such as Ada, Shawnee, Tecumseh, Seminole, Wewoka, Coalgate and Holdenville, are in extreme need of an adequate municipal and industrial water supply. However, at this time, there are no existing, under construction, or authorized Corps of Engineers or Bureau of Reclamation lakes within the east central area. In fact, there are not any lakes within the area which have a significant water supply storage capability. Water rationing has been a regular occurrence over the past several summers for nearly all communities within this area. This critical need for future water supply is clearly demonstrated by the competition for the municipal/industrial water supply storage to be provided by the proposed Parker Lake located in the northern part of Coal County. Although this lake has not even been authorized, applications for water rights already exceed by ten times the amount of water that will be available from this lake.

To further exemplify this situation, I would like to discuss the two largest cities in this area. The City of Ada, which is the county seat of Pontotoc County, is one of the cities which has applied for water rights on Parker Lake. The City of Ada, with a population of 16,100, relies entirely on ground water as a water supply. These ground water sources are no longer dependable for the City of Ada for several reasons. The city has lost substantial percentage of its water rights to ground water sources as a result of court rulings. Another factor is the depletion of the ground water sources as a result of continuing increases and demand. The City of Shawnee, the county seat of Pottawatomie County, is located near the Oklahoma City metropolitan area. The lack of an adequate water supply has plagued this city of nearly 27,000 people for the last several years. Although the city has maintained a per capita water use rate which is one-half the rate of some of the communities which are outside this water-short area, it still has had to ration water.

Again, these are but two examples. It is important to note that these cities, Ada and Shawnee, along with others, are proceeding with their own efforts to solve their immediate and interim water needs. The City of Ada, while pursuing the reversal of the court decisions, is also investigating other supplies of water. The City of Shawnee passed a one-cent sales tax to finance a connection to the aquaduct transporting water from Lake Atoka to Oklahoma City. Although only a short-range solution, as Oklahoma City will within the next two years use the full capacity of this aquaduct for their own purposes, it does indicate the city's interest and willingness to address solutions and try to solve its own problems. Shawnee citizens are also working very closely with the Pottawatomie County Development Authority to create water supply in a multi-purpose Soil Conservation Service lake. However, this is a small lake providing only a minimum amount of water supply storage and can only be considered an interim solution.

I hope from my statements you will understand, Mr. Chairman, that we as communities in the East Central area are not looking to the Committee to help us without having done everything possible to help ourselves. It must be realized that once we have completed all of the things that have been mentioned, we will still not have obtained a permanent solution to the water problems of our area. This is where you and your fellow members of this Committee can help people of our area help themselves. We feel this can best be done by your Committee appropriating funds for the following projects.

PARKER LAKE, OKLAHOMA

Parker Lake, on Muddy Boggy Creek, Oklahoma, is an early action project recommended in the Red River Below Denison Dam Comprehensive Basin Study. The project would provide protection against the standard project flood and a dependable water supply of 42 million gallons per day for municipal industrial facilities. The project also provides recreation benefits. The lake would have a storage capacity of 237,000 acre feet.

A survey report recommending the construction of the project was approved by the Office of the Secretary of the Army and transmitted to the Water Resources Council on 15 January 1981. This report indicated that the project cost is estimated to be $42.3 million with a benefit-to-cost ratio of 1.2 to 1.0.

Authorization for construction of Parker Lake is pending in both 98HR3678 and 98S1739. The Association understands that the Oklahoma Water Resources Board has identified Parker Lake as its number-one priority in the category of Continuation of Planning and Engineering (CP&E). Funding of $100,000 was received for CP&E work on Parker Lake in FY84. We strongly support this action. However, we understand this was far below the stated Corps capability. The Association understands that if the full capability level were funded through the CP&E phase, this most needed project could be advanced by two years.

The Association requests that Congress authorize Parker Lake and that appropriations be made in FY85 at 100% federal cost for CP&E at the Corps' full capability on this project ($750,000).

EAST CENTRAL OKLAHOMA WATER SUPPLY STUDY

Although no lakes of significant size exist, are under construction, or are authorized in our area, there are several potential lake sites which have been identified. Many of these potential lake sites, however, were identified fifteen to twenty years ago, and other than Parker, have received little (if any) study. It is obvious with the applications for water rights already existing for Parker, that this lake will not by itself solve the water supply storage needs of this area.

A special water resource development task force composed of the three federal water agencies (Bureau of Reclamation, Corps of Engineers, Soil Conservation Service) and the Oklahoma Water Resources Board recently recommended that a multi-purpose study be undertaken in this area to fully develop water resources and provide an adequate system to meet all future needs. This project is envisioned to be a total regional water supply system. It would include water supply storage, treatment, and transmission; hydropower; recreation; and flood control. Authorization for this study is currently pending in HR4746. Similar authorization is also pending before the Senate. This authority would direct the Bureau of Reclamation to perform not only a multi-purpose study, but a cooperative effort with other federal and state agencies.

The East Central Water Association understands that this water supply study has been included in the Bureau of Reclamation out-year's budget. Because of the long time frame involved in final implementation of water resource projects, and the urgent need of this five-county area, it is imperative that we not delay this study an additional year if we want to be in a position to avert a rapidly developing water crisis in this area. The short-term solutions that the cities and towns in this area are currently implementing are just that--short term. We've got to identify and move toward implementation of longer term, more permanent solutions.

The Association strongly supports this project and we request this effort be moved forward and $200,000 be included in the FY85 appropriations bill for the Bureau of Reclamation to initiate this much needed project. We also request that the appropriations be in keeping with the 100% federal cost policy currently established by Congress and not be subject to any of the Administration's proposed cost-sharing policies.

Again, on behalf of the East Central Water Association, I want to thank you for your kind attention and this opportunity to testify before you.

POTEAU/DEEP FORK ASSOCIATION TESTIMONY

The Poteau/Deep Fork Association (PDFA) is a voluntary citizens' group interested in supporting water development projects and other natural resource development in the ten counties of Oklahoma impacted by the Poteau and Deep Fork Rivers. The PDFA was formed for the purpose of promoting the orderly development of the water and natural resources of these two river basins.

The Deep Fork River is a tributary of the Canadian River; forms one of the major arms of Lake Eufaula, an existing COE multi-purpose project; and ultimately empties into the existing McClellan-Kerr Navigation Channel on the Arkansas River. The Poteau River drains an area of about 1900 square miles in eastern Oklahoma and western Arkansas. The drainage basin, which is about 1.2% of the drainage area of the Arkansas River, is roughly rectangular in shape and is mountainous. There are approximately 3 billion tons of coal reserves located in the basin and they are being mined at an increasing rate. In addition, approximately 1 million bushels of soybeans are produced each year in the area.

Navigation on the Deep Fork River is not a new concept. It was championed in the latter 1950's by the late Senator Robert S. Kerr as an original part of the McClellan-Kerr Navigation System to serve the major industrial center of Oklahoma City and the vast agricultural grain industry of western Oklahoma and the Texas panhandle. A report showing the project to be economically feasible was forwarded by the Tulsa District to the Southwest Division and hence to the Office of Chief of Engineers in the early 1960's. Unfortunately, the Board of Engineers for Rivers and Harbors rejected the report on the grounds that Tulsa District had over-estimated shipments of petroleum products and coal that would be carried by the waterway. The project was then dropped. It is important to note that although this project did show an economic feasibility at one time, it was a single-purpose (navigation) project.

The Oklahoma Water Resources Board recently completed a state water plan which included a project to transfer excess flood waters from the Robert S. Kerr Lake, a part of the existing navigation channel on the Arkansas River, to the water deficient areas of metropolitan Oklahoma City and the tremendously productive agricultural areas of the high plains of Oklahoma. The agriculture of this area is heavily dependent upon irrigation and is in jeopardy because of the depletion of the eight-state Ogallala ground water aquafer. Although technically feasible, the project did not prove economically feasible under current conditions and evaluation criteria. This plan called for water to be transported by non-navigation channels, lift stations, and aquaducts along a route closely paralleling the proposed navigation route on the Deep Fork River. Again, this project was designed and evaluated as a single-purpose project (water supply). To maximize the potential of this water resource, we must quit looking at it as single-purpose projects and consider it from a multi-purpose standpoint. This multi-purpose approach would include ways of combining navigation and water supply plans as well as other purposes such as hydropower, recreation and flood control.

As a part of the Poteau/Deep Fork navigation system, there are two alternative routes being considered between the existing McClellan-Kerr Navigation Channel and Lake Eufaula. The alternative with the most local support would extend navigation from the Arkansas River up the Poteau River and to Lake Wister, an existing Corps multi-purpose lake. The level of Lake Wister would be raised and navigation would extend up the Fourche Maline Creek arm to a point near Wilburton, Oklahoma, where it would be diverted into the Gaines Creek arm of Lake Eufaula. This navigation alternative has the advantage of providing a long-term solution to the water supply problems of this area. In addition, it would open up huge deposits of metallurgical coal and other resources to water transportation.

About 32,400 acres of land in the Deep Fork River and Captain Creek flood plains need drainage if optimum use of the land is to be realized. The existing drainage problem is caused by frequent floods that result in extensive areas of standing water. Flood waters in lower reaches are trapped, as a result of poor natural drainage, and form pools and swampy conditions that remain for long periods. Channel improvements could provide the necessary degree of protection to allow construction of on-farm drainage works. Public concern about this condition has been at a high level for many years. High water conditions often cause state highways to be closed and on rare occasions flooding along Dry Creek, a tributary of the Deep Fork, has forced the closing of the Turner Turnpike (a part of the state's interstate highway system).

The PDFA believes the following projects would have a significant impact on improving this nation's great water and natural resources.

WISTER LAKE, OKLAHOMA

Last year this Committee, being aware of the continuing sedimentation problems which interfere with the authorized water purpose of the Wister Lake Project, provided for the raising of the top of the conservation pool permanently by 3 feet and seasonally from June 1 to December 1 by an additional 3.4 feet and included $100,000 for any cost associated with carrying out this directive. The PDFA wants to go on record as expressing our appreciation for this action. Many times we have come before you asking the Committee to do certain things, and most of the time we don't come back and say "thank you" when you have done something that we have requested. We just want to say "thank you" for the people of the Poteau Basin and those that use Wister Lake as a water supply.

SOUTH CENTRAL / SOUTHEAST OKLAHOMA COMPREHENSIVE STUDY

Authority for this study was granted in public law 98-63, June 30, 1983. This comprehensive study will result in recommended measures for the control of floods; development of water supply, treatment, and transmission facilities; irrigation; hydroelectric power; recreation; improvements for navigation and port site development; conservation and efficient utilization of land resources; and other measures to achieve the objectigves of the comprehensive effort. Reconnaissance level studies were initiated in October 1983 with funds provided in the FY84 Energy and Water Appropriations Bill.

The PDFA strongly supports the continued funding of this study and requests Congress to appropriate full Corps' capability level funds ($100,000) to initiate a feasibility study at 100% Federal cost.

ARCADIA LAKE

Arcadia Lake is located at mile 213.8 on the Deep Fork River in the metropolitan area of Oklahoma City and Edmond, Oklahoma, about 1½ miles west of Arcadia, Oklahoma. Arcadia Lake was authorized by the Flood Control Act of 1970 for the purposes of flood control, water supply and recreation.

Construction on the COE lake began in September 1980. The entire project is about 53% complete. The total estimated cost is $85.3 million. Impoundment is scheduled in March 1986 with the completion of the project scheduled for Sept. 1987.

The City of Edmond, as a local sponsor, has signed contracts with the Corps to repay the cost of water supply and one-half the separable recreation costs. This equates to about 56% of the total project cost. This is another example of how well our current cost-sharing policies on water resource projects work. The City of Edmond wants to add the construction of water treatment and transmission facilities as an authorized project feature. These facilities were introduced for authorization in the proposed Omnibus legislation, 98HR3678. Under this authorization non-federal interest would pay 20% up front and 80% pay back. The interest rate would be the rate existing under the water supply storage contract, 7.21%. Estimated cost is $12 million.

This Association wants to go on record as being a strong supporter of the continued funding for the construction of the Lake Arcadia project and the additional funding for the water treatment and transmission facilities upon their authorization. We therefore request that this Committee appropriate necessary funds to the Corps to continue the construction of this project in accordance with the full capabilities as expressed for FY85.

CANADIAN RIVER AND TRIBUTARIES

The Canadian River and Tributaries Study was authorized by the Flood Control Act of 1937 (PL75-406); PL79-525; Senate Committee Resolutions of 1944, 1949, and

1976, and House Committee Resolutions of 1944, 1950, and 1976. The Deep Fork River, with a drainage area of 2,548 square miles, is a major tributary of the Canadian River.

The Corps, with funds included in the FY84 Energy and Water Appropriations Bill, initiated studies in cooperation with the SCS on the flood control and drainage problems of the Deep Fork River. The Corps study will include the development of alternatives for channel improvement measures along the main stem of the river. The SCS is continuing the development of the upstream watershed structures that would complement the flood protection afforded by implementable plans along the main stem.

This project represents an excellent example of the coordinated use of the resources of two federal water agencies to address a significant and at times life-threatening problem for those people who live along the Deep Fork River. The Association requests that the Committee appropriate those funds necessary for this continued effort of providing a 100% Federal cost of those funds necessary to meet the Tulsa District's full capability ($250,000) with regard to the Canadian River and Tributaries project.

On behalf of the PDFA, I want to thank you for this opportunity to testify in support of these projects we feel are so vital to our area.

OKLAHOMA DELEGATION--RED RIVER VALLEY ASSOCIATION TESTIMONY

Mr. Chairman, 12 of the 21 counties in the RedArk area lie within the Red River Basin. Therefore, we are strong supporters of the Red River Valley Association. The Association is a 59-year-old voluntary group of citizens banded together to advance the economic development and future well being of the four-state Red River Basin area. We, as the Oklahoma Delegation, represent one of those four states. We would like to add a hearty second to the testimony which you will receive from the full Red River Valley Association. We will not duplicate this testimony; however, we would like to address certain projects which are of most importance to the Oklahoma Delegation.

RED RIVER BASIN, ARKANSAS, TEXAS, LOUISIANA & OKLAHOMA--COMPREHENSIVE STUDY

We are aware of reconnaissance level study appropriations which were included in the FY84 Energy and Water Appropriations Bill for the above study. This comprehensive study would recommend measures for the following: control of flood; development of water supply, treatment, and transmission facilities; the generation of hydroelectric power; the development and enhancement of the recreation potentials and enterprises of the region; and the improvement of the rivers for navigation and port site development. Such a study was strongly recommended as a result of the water resource task force composed of the three federal water agencies (Corps, Bureau, SCS) in order to provide a plan to address the maximum development of the water resources of the Red River and its tributaries to obtain the maximum economic and employment opportunities. We strongly support the continued funding of this study and request Congress to appropriate full Corps capability level funds ($200,000) to initiate a feasibility study at 100% Federal cost as a part of the FY85 Energy and Water Appropriations Bill.

SARDIS LAKE, OKLAHOMA

Sardis Lake is located on mile 2.8 on Jackfork Creek, a tributary of the Kiamichi River, about 3 miles north of Clayton, Oklahoma in Pushmataha County. Sardis Lake was authorized by the Flood Control Act of 1962 for purposes of flood control, water supply and recreation. Construction began in 1975. Impoundment of Jackfork Creek behind the structure occurred with the official gate closing in January 1983. The dam and lake were officially dedicated in June 1983.

As authorized, the recreation areas at Sardis Lake were to be fully federally funded, of which $2,313,000 remains to be appropriated. The FY84 House Energy and Water Development Appropriation Bill called for an addition of $1 million at Sardis to allow federal construction of recreation areas in keeping with the provisions of the original authorization and directed the Corps to construct, operate, and maintain the recreation areas as authorized. However, the conference report reduced the appropriations to $500,000. The Oklahoma delegation strongly urges Congress to appropriate the remaining funds in accordance with the Corps full capability to complete the recreation areas at Sardis Lake as originally planned and authorized.

McGEE CREEK LAKE, OKLAHOMA

McGee Creek Lake was authorized for construction, operation, and maintenance in accordance with federal reclamation laws, a public law 94-123, on September 28, 1976. McGee Creek Lake is located in Atoka County in southeastern Oklahoma.

McGee Creek is a northern tributary of Moddy Boggy Creek, which is a major tributary of the Red River. The dam site is about 3.4 miles above the confluence of McGee and Muddy Boggy Creeks. The project was authorized for water supply, flood control and recreation. Construction began on the project in June 1982.

The FY84 Water and Energy Development Appropriations Bill provided $45,360,000 for the continued construction of the McGee Creek Project, including $5 million for roads associated with the project. The Oklahoma Delegation strongly supports continuation of this project and the concept demonstrated by the project of maximum development of the local economy by maximum utilization of opportunities provided by the project's development. The Delegation urges the members of the McGee Creek Authority which are located outside of the Red River Basin to continue to cooperate with the Basin interests to fully develop the economic potentials of this project to the project area.

The Oklahoma Delegation asks that Congress appropriate necessary funds to the Bureau of Reclamation to continue the construction of this project in accordance with its full capability in FY85.

On behalf of the Oklahoma Delegation of the Red River Valley Association, I want to again thank you for this opportunity to appear before your Committee and to testify in support of porojects we feel are vital to the development of the water resources of our area and to the nation as a whole.

TESTIMONY ATTENDEES

	Name	Representing
1.	Gary Ainsworth	Project Director, McGee Creek Rural Demonstration Project, Atoka, OK
2.	Shari Black	Admin. Asst., RedArk Development Authority, Stuart, OK
3.	Harvey Bollinger	Executive Director, RedArk Development Authority, McAlester, OK
4.	Margaret Bollinger	Vice-president, American State Bank, Broken Bow, OK
5.	Ron Bourbeau	City Manager, City of Shawnee, Shawnee, OK
6.	Leonard Briley	City Manager, City of Ada, Ada, OK
7.	Bill Chapman	Attorney at Law, Ardmore, OK
8.	Dallas Graham	City Manager, City of Edmond, Edmond, OK
9.	Wayne Manley	Exec. Director, Central Oklahoma Economic Development District, Shawnee, OK
10.	Chester Nickell	Retired, Oil and Gas Merchandising, Ada, OK
11.	Chuck Pfeiffer	Code Administrator, City of Edmond, Edmond, OK
12.	Joe Phelps	Consulting Engineer, Seminole, OK
13.	Leo Reasoner	Haskell County Commissioner, Kinta, OK
14.	A. A. Sewell	Board Member, Kiamichi Economic Development District, Hugo, OK
15.	Jim Slade	Consulting Engineer, Oklahoma City, OK
16.	Joe Taron	Dentist, Shawnee, OK
17.	Jerry Wall	City Council Member, City of Edmond, Edmond, OK
18.	Cloyce Wiley	Chamber of Commerce, Tecumseh, OK

BIG AND LITTLE SALLISAW CREEKS, OKLA.

PREPARED STATEMENT

Senator COCHRAN. The committee has received a statement from the city of Sallisaw, Okla., regarding the Big and Little Sallisaw Creeks navigation project. That will be placed in the record at this point.

[The statement follows:]

STATEMENT OF GEORGE GLENN, MAYOR, SALLISAW, OKLA.

I want to thank you on behalf of the City of Sallisaw and our delegation for the opportunity of appearing before you today.

My name is George Glenn, Mayor of Sallisaw, Oklahoma. Others with me today in support of this project are:

Jim Mayo, Publisher, Sequoyah County Times
Calvin Remy, Chairman, Sallisaw Port Authority
Jim Hudgens, City Manager, City of Sallisaw

We realize and appreciate the value of your time, therefore, my remarks will be brief and to the point.

The purpose of our appearance is to request the appropriation of six (6) million dollars in the upcoming fiscal year budget to fund construction of the Big and Little Sallisaw Creeks, Oklahoma Navigation Project. This project was authorized in Section 130 of the 1976 Water Resources Development Act (PL 94-587) and the River and Harbor Act of 1946 (PL 525, 79th Congress, Second Session) as amended.

The feasibility of a port project on Sallisaw Creeks was first studied in 1965. In the past nineteen (19) years, this project has been studied, analyzed, probed, re-analyzed and re-studied, etc., etc., ad infinitum. The last reports on this project were the Final Environmental Impact Statement published by the Corps of Engineers in November, 1981 and Phase II of the General Design Memorandum published in December of 1983. Every report prepared on this project has concluded that the Sallisaw port is technically and economically feasible. The latter states a benefit-to-cost ratio of 1.5 to 1. This exceeds the benefit-to-cost ratio of the McClellan-Kerr project of 1.3 to 1 when it was approved. We believe that this ratio is somewhat understated because it was derived only from transportation savings on commodities to be handled by the port. We believe that the port will be the catalyst for the expansion of existing industrial, manufacturing and agricultural businesses in the area. We believe that the port will be the catalyst to attract new business and industry to the area. The expansion of existing and the attraction of new industry to our area equates to jobs and an enhanced tax base. Construction of the McClellan-Kerr Navigation System removed 53,000 acres in Sequoyah County along from agricultural production and the tax rolls. The McClellan-Kerr project was supported and encouraged by the leadership in Sallisaw and Sequoyah County. We believed, as did Congress, that the objectives of the navigation system were beneficial to Eastern Oklahoma and the nation. We believe that the continued development of the navigation system with justifiable ports like the Sallisaw Creeks project are a necessary part of achieving these objectives. Sequoyah County is an economically depressed area that has suffered from chronic high unemployment for many years. We believe this project will help cure that problem.

Sequoyah County contributed 53,000 acres to the McClellan-Kerr project. Acquisition of these properties began in the early 1960's. Inundation of these properties occurred in 1970. At current values, the inundated property has reduced the annual tax levy by approximately $190,000 per year. This amount multiplied by the fourteen (14) years since inundation equal a total tax dollar loss of $2,660,000. In addition to the actual dollars lost, $2,650,000 in assessed value was lost from the tax rolls. This assessed value loss substantially diminished the general obligation bonding capacity of local government. Two examples of this situation are: the Sallisaw Independent School District was given one-hundred and five (105) acres of land on which to build a new school. The District, however, does not have sufficient assessed value (bonding capability) to issue the bonds for construction. The Sequoyah County Commissioners are under an order to improve the county jail or face closure. Even with a $200,000 grant from the State of Oklahoma, the county does not have sufficient assessed valuation (bond capacity) to issue bonds for construction. The major portion of the 53,000 acres inundated by the McClellan-Kerr project was in agricultural production. Prior to the McClellan-Kerr project, Sequoyah County was the number one soybean producing county in the state. In the years following the McClellan-Kerr project, Sequoyah County has dropped to seventh in soybean production. With the drop in production has been a corresponding loss in agricultural jobs and related support services.

Beginning with the first studies in 1965 (H. E. Bailey Study and Poe and Associates Study), a total of $114,500 has been expended on feasibility and development reports. In addition, the City of Sallisaw has expended a total of $345,300 on electric distribution system improvements, sewer treatment and collection system improvements, water distribution system improvements, access road to port site and four separate trips to Washington. The utility system improvements were made and sized predicted upon the expected development of the port.

Private land ownership has dedicated in excess of two-hundred acres contiguous to the port site for industrial development. The City of Sallisaw has committed to the initial development of forty-four (44) acres of water frontage development. The following is a list of local activities and non-Federal cost delineated in the 1974 Poe and Associates Study:

Upgrade and extend access road	$ 260,000
Electric service	25,740
Natural gas service	97,688
Fencing	3,094
Landscaping	1,300
Port office	2,600
Rail service	286,000
Land acquisition	93,200
	$ 769,622
Plus amount already expended	345,300
	$1,114,922

It must be remembered that the cost supplied in the Poe and Associates Study was based on 1974 dollars. Therefore, these future costs to make the port functional must be adjusted for the inflationary spiral that has occurred over the past ten (10) years. These costs represent a major cost-sharing investment by the local community.

The location of the project is excellent. The turning basin is located two (2) miles south and one-half (1/2) mile west of the intersection of U.S. Interstate 40 and U.S. Highway 59. The turning basin is within one-quarter (1/4) mile of the City of Sallisaw sewage treatment plant. Within three (3) miles of the site are two (2) rail systems - the Missouri-Pacific and the Kansas City Southern. Sufficient water, sanitary sewer and electric utility capacities to serve the site are available from the City of Sallisaw systems.

In closing, I would like to point out that the McClellan-Kerr Navigation System has been successful. Were it not for the foresight of Congress, the Arkansas River Navigation System would not be contributing to our national economic development. The Administration's proposal to increase the local cost of developing this great natural resource must be opposed or development will cease. To better utilize that investment and the opportunities it presents, continued development of the system is a must. The funding, construction and operation of this project is a viable cost-effective addition to the navigation system. The time for studies and reports is ended. The time for construction and operation of the project is here. The Tulsa District Corps of Engineers has the capacity to have this project completed within twenty-four (24) months from funding authorization. We urge you, in the strongest terms possible, to make this project a reality.

Thank you.

I or the members of our delegation will be happy to answer any questions you might have.

NATIONAL DREDGING PROGRAM

PREPARED STATEMENT

Senator COCHRAN. Before we recess, I also want to incorporate in the record a prepared statement submitted by the National Association of Dredging Contractors.

If there is no objection, that statement will go into the record at this point.

[The statement follows:]

STATEMENT OF J. A. DOWNS, PRESIDENT, NATIONAL ASSOCIATION OF DREDGING CONTRACTORS

I am pleased to appear before the Subcommittee to give our annual report on the capabilities of the dredging industry.

The total Country hopper capacity - Corps and industry - today is over 50% greater than that of 1977. The mix of dredge size ensures efficiency for all conditions encountered throughout the Country. There are three large units (2 industry and 1 Corps); nine medium size (7 industry and 2 Corps); and four small size (3 industry and 1 Corps).

There are currently four industry hoppers on the West Coast in addition to two Corps units - a total of 6. Industry has already built one hopper especially for the Great Lakes. It is currently in the Port of Chicago waiting to start the 1984 season. Its workload might well dictate use of a second hopper this year. A substantial amount of the Great Lakes work previously done by the Corps' hoppers will be done, at reduced cost, by non-hopper equipment this year.

Last year there was some concern over industry's capabilities on the Great Lakes. Almost all of the Fiscal Year 1984 dredging workload for the Great Lakes has now been bid and I am pleased to report the following:

1) The Corps has taken bids on 37 Great Lakes projects.

2) Seventeen different contractors have submitted bids.

3) A total of 158 bids were submitted - an average of 4.3 per project.

4) At least three bids were submitted on each project and as many as nine were made.

5) For the entire 37 projects, the low bids were only 3% more than the Corps' base estimate without provision for profit.

These results showed without doubt that there is: 1) keen competition which keeps costs down; 2) wide interest ensuring timely response.

I should not go further without acknowledging the excellent cooperation the industry has experienced from the Corps. This spirit starts in the Chief's office and goes down through all levels of command. We further salute the Corps for its CERF program. The whole operation is a fine example of what success results from close cooperation between the private sector and its Government. There is no question that the precepts on which this Country was founded and prospers - the law of supply and demand and reliance on the private sector rather than Government - still works.

The dredging industry currently has capability well beyond its present utilization (55%). It has also proved its willingness to spend freely on new equipment when a market develops. Our studies show conclusively that the present industry equipment level is more than sufficient to undertake the most optimistic deep port program. In addition to its all weather hopper fleet, it also has over twenty non-hopper dredges certified under the Ocean Barge Act to work in unprotected waters.

We urge the enactment of legislation and appropriations necessary to enable the ports of the United States to regain their worldwide status which has been lost over the last 14 years.

SUBCOMMITTEE RECESS

Senator COCHRAN. With that, the committee will stand in recess until 2 this afternoon, in the same room. Until then, we are in recess.

[Whereupon, at 12:08 p.m., the subcommittee was recessed, to reconvene at 2 p.m. the same day.]

(Afternoon Session, 2:10 p.m., Tuesday, April 3, 1984)

NONDEPARTMENTAL WITNESSES

SUBCOMMITTEE PROCEDURE

Chairman Hatfield [presiding]. The subcommittee will please come to order.

We have a large number of witnesses that wish to be heard today. Therefore, in accordance with our notification to each of the witnesses, we ask that everyone hold his or her oral testimony to but a summarization of the full statement, which will be included in the record. If each witness will do this, I am sure we can get through the long list of all who wish to testify today.

Puerto Rico Water Resource Development Projects

STATEMENT OF HON. BALTASAR CORRADA, CONGRESSMAN FROM PUERTO RICO

I am very happy to welcome our colleague from the House, Congressman Corrada of Puerto Rico.

Congressman, you may proceed as you wish. We will include your entire statement in the hearing record. We are happy to have you here today.

Mr. Corrada. Thank you, Mr. Chairman. I appreciate the opportunity of testifying today. I will summarize my statement.

Portugues and Bucana Rivers Flood Control Project

Some of the projects and studies which I have described have been included in the administration's budget request. One such project is the Portugues-Bucana for $27 million. This project was authorized in three parts by the Flood Control Act of 1970. It consists of two dams and channel improvements. The two dams will store water for flood control, water supply, and recreation. An estimated $8 million in flood damage has already been averted because of the work already done in the project. The total benefits for the project already exceed $150 million. The remaining benefit-to-cost ratio at this project is 2.1 to 1.

I urge you to continue to support this ongoing project and support the administration's request of $27 million for it.

Ponce Harbor, P.R.

Another project, the Ponce Harbor project, was authorized under section 201 of the Flood Control Act of 1965. It will help develop the potential of this important southern port city and provide a needed boost to the weaker economy of Puerto Rico's south and southwest region. The harbor is on the south-central coast of Puerto Rico, about 150 miles by water from San Juan Harbor.

The current cost-to-benefit ratio for this project is 7.9 to 1. The administration has proposed $25,000 for the Ponce Harbor project for continued engineering and design for this harbor project. Unfortunately, Mr. Chairman, this is inadequate. The project is ready to begin the construction phase. In my mind it would be a waste of the taxpayers' money to appropriate for unneeded engineering and design in order to further postpone work on this very worthwhile project. I urge the committee to recommend an appropriation of $5 million to begin the work so greatly needed in this part of the island.

SAN JUAN HARBOR, P.R.

I will now turn to another project of vast economic impact, the dredging of San Juan Harbor. San Juan Harbor is the most important American port facility in the Caribbean. It plays an essential role in the administration's Caribbean basin initiative as a fundamental link in trade between the United States, including Puerto Rico and the CBI countries. This harbor is also important to our national defense in both readiness training as well as naval operations. San Juan Harbor is used by both the U.S. Atlantic Fleet and NATO during training exercises along our east coast. This harbor is a vital part of our economy. Eight percent of all cargo entering or leaving Puerto Rico is handled by the Port of San Juan.

The House and the Senate Water Resources Subcommittees have included in their water resources omnibus bill the San Juan Harbor project. Twenty million dollars would be required for the construction phase planned for fiscal year 1985. Total cost of the project is currently estimated at $73 million.

STUDIES AND INVESTIGATIONS

In addition to these projects, there are some studies I would like to refer to, Mr. Chairman. Four flood control studies in Puerto Rico need funding at this time, including two which have been included in the administration's request. I will not describe them. They are in my testimony, Mr. Chairman. They are the Rio Grande de Loiza, with $360,000; and Rio La Plata, with $112,000; the Rio Guanajibo, with $180,000; and the Rio Grande de Arecibo, with $70,000.

Before leaving this committee today, I would like to bring to your attention a very important project for the metropolitan area of San Juan. I am referring to the Rio Puerto Neuvo flood control project, which has not been authorized yet, but which I hope will receive congressional approval in the near future.

This river, which is part of the Rio Piedras and some tributaries, runs through close to 10 winding miles in the heart of the commercial, financial, and residential districts of the metropolitan San Juan area. Close to a quarter of a million people live in this area; the largest shopping center in the Caribbean is located there, the U.S. general post office, the National Guard armory; and the police headquarters. All of these are located in the basin of this river.

Unfortunately, the river causes an average $20 million of damage annually because of floods. I am hopeful that Congress will act expeditiously on this meritorious project once the Chief of Engineers report is obtained later this year. However, in order to maintain the current rate of progress in this project, I request this subcommittee to recommend $200,000 for the continued planning and engineering.

I thank the chairman and this subcommittee for listening to my testimony. I urge you to study it carefully and to support these vital projects that will have a great impact on the economic development of Puerto Rico, Mr. Chairman.

Chairman HATFIELD. Thank you very much, Mr. Congressman. About 25 years ago next July I guess it was, when I attended my first Governors' conference in San Juan when Munoz Marin was our host Governor at the time. One of the presentations he made was on the flood control projects and other matters that related to the building of the infrastructure of his area.

I have since become a very strong supporter of the projects in Puerto Rico, as you know. In fact, I have just written a letter congratulating former Governor Ferre on his 80th birthday, which I believe is upcoming soon. He was leading a statehood party when I was there in 1959.

Mr. CORRADA. That is right.

Chairman HATFIELD. I guess that has changed somewhat in his thinking. These are very worthwhile projects. The Congress has invested heavily in them. I think the one that you referred to, the Rio Guanajibo flood control, is again one of those that has to get through the authorization process and I am hopeful we can get an authorizing bill out of the committees this year.

We have a lot of other projects that are very important to the Nation as a whole to be authorized. We would be very happy to continue to work with you on these projects.

We thank you very much for the time you have taken to come over here.

Mr. CORRADA. Thank you very much, Senator. Of course, former Governor Ferre is a good friend. We all celebrate his 80th birthday. He is one outstanding Puerto Rican: former Governor, former president of the senate, and a great industrialist. I am sure would he be here, he would be not only supporting this but, of course, expressing his appreciation for your courtesy in sending him that letter.

Chairman HATFIELD. Thank you.

[The statement follows:]

STATEMENT OF BALTASAR CORRADA, RESIDENT COMMISSIONER FROM PUERTO RICO

Mr. Chairman and members of this distinguished committee, I am Baltalsar Corrada, Resident Commissioner from Puerto Rico and come before this committee to set forth the funding needs for the various studies and projects undertaken by the U.S. Army Corps of Engineers in Puerto Rico.

Some of the projects and studies which I will describe have been included in the administration's budget request. One such project is the Portugués-Bucaná for $27 million. This project was authorized in three parts by the Flood Control Act of December 30, 1970. It consists of two dams and channel improvements. The two dams will store water for flood control, water supply, and recreation. The project will essentially provide flood protection and a dependable water supply of about 33.8 million gallons per day to the city of Ponce, the second most important city in the island and the largest on our south coast. I should point out that the southern region of Puerto Rico, which is prone to flash floods, is already reaping the benefits of this project, even though the completion date is still some years away. An estimated $8 million in flood damage has been averted because of the work done in the project. The total benefits for the project already exceed $150 million. The remaining benefit-to-cost ratio of this project is 2.1:1. I urge you to continue to support this ongoing project.

The Ponce Harbor project, authorized by Senate and House resolutions in 1976 under the authority of section 201 of the Flood Control Act of 1965, as amended, will help develop the potential of this important southern port city and provide a needed boost to the weaker economy of Puerto Rico's south and southwest region. The harbor is on the south central coast of Puerto Rico, about 150 miles by water from San Juan Harbor. The current cost-to-benefit ratio for this project is 7.9:1. The project provides for a 600-foot wide by 36-foot deep channel from the Caribbean Sea to the harbor, a 400-foot wide by 36-foot deep channel into the harbor, and a 36-foot deep channel irregular shaped basin.

The administration has proposed $25,000 for continued engineering and design of this harbor project. Unfortunately, this is inadequate. The project is ready to begin the construction phase; it would be a waste of the taxpayers' money to appropriate funds for unneeded engineering and design in order to further postpone work on this very worthwhile project. I urge this committee to recommend an appropriation of $5 million to begin the work so greatly needed in this part of our island.

I now turn to another project of vast economic impact, the dredging of San Juan Harbor. San Juan Harbor is the most important American port facility in the Caribbean. It plays an essential role in the administration's Caribbean basin initiative as a fundamental link in trade between the United States (including Puerto Rico) and the CBI countries. This harbor is also important to our national defense in both readiness training as well as naval operations. San Juan Harbor is used by both the U.S. Atlantic Fleet and NATO during training exercises along our east coast. This harbor is a vital part of our economy. Eighty percent of all cargo entering or leaving Puerto Rico is handled by the Port of San Juan.

The House and Senate Water Resources Subcommittees have included in their water resources omnibus bill the San Juan Harbor project. The project calls for deepening the bar channel and shifting its alignment 350 feet to the west. It also includes widening and deepening of various channels within the harbor. Twenty million dollars would be required for the construction phase planned for fiscal year 1985. The total cost of the project is currently estimated at $73 million.

Four flood control studies in Puerto Rico need funding at this time, including two which have been included in the administration's funding request.

The Rio Grande de Loíza is the largest watershed on the island and creates extensive flooding and erosion problems. It is a major source of water for the San Juan metropolitan area. The study is investigating three potential dam sites to determine feasibility for solving flood protection and water supply problems with the existing Carraizo Dam. Its combined benefit-to-cost ratio is 2.9:1, which breaks down into 1.6:1 for the flood control aspect of the project and 6.8:1 for the water supply investment. The $360,000 proposed by the administration is sufficient for the work to be done next fiscal year.

The Rio La Plata study has been prompted by the expansion of metropolitan San Juan which created a demand for industrial sites in the lower floodable basin of this river. The towns of Toa Baja, Dorado, and Toa Alta are currently subject to flooding which could be controlled by levees along a designated floodway or dam construction or a combination of both. Again, the $112,000 proposed by the administration is sufficient to continue progress on the study.

The Río Guanajibo study in the western part of the island was initiated by the Corps of Engineers under section 204 of the Flood Control Act of 1970. The potential for disaster in this area came into focus during the floods of tropical storm Eloise in 1975 which caused heavy losses in human lives and in property damage. It should be pointed out that this is not a new-start project, but that I am seeking renewed funding for an ongoing study. A total of $180,000 is needed to provide adequate funds for continuation of the study.

The final study which I hope this committee will recommend is a study for the flood problems in the basin of the Río Grande de Arecibo. This town in the north central section of the island is the region's commercial and industrial hub. Its population of 90,000 is hurt by frequent floodings caused by the junction of three rivers and smaller tributaries. I urge this committee to recommend an appropriation of $70,000 for this new-start project.

Before leaving this committee today, I would like to bring to your attention a very important project for the metropolitan area of San Juan. I am referring to the Río Puerto Nuevo flood control project which has not been authorized yet, but which I hope will receive congressional approval in the near future. This river which is part of the Río Piedras and some tributaries runs through close to 10 winding miles in the heart of the commercial, financial, and residential districts of the metropolitan San Juan area. Close to a quarter of a million people live in this area; the largest shopping center in the Caribbean is located there, the general post office, the National Guard armory, and the police headquarters are all located in the basin of this river. Unfortunately, the river causes an average $20 million of damage annually because of floods. I am hopeful that Congress will act expeditiously on this meritorious project once the Chief of Engineers report is obtained later this year. In order to maintain the current rate of progress in this project, I request this subcommittee to recommend $200,000 for continued planning and engineering.

I am grateful to this committee for the opportunity to come before it today and express the needs and concerns of the 3.2 million American citizens living in Puerto Rico. I look forward to working with you to adopt these suggestions which will have an enormous economic impact on the people of Puerto Rico.

COLUMBIA DAM, TENN.

STATEMENT OF CLAYBOURNE ROSS, EXECUTIVE DIRECTOR, UPPER DUCK RIVER DEVELOPMENT AUTHORITY

ACCOMPANIED BY:

BILL CHAFIN, MAURY COUNTY CHAMBER OF COMMERCE, COLUMBIA
TAYLOR RAYBURN, MAURY COUNTY EXECUTIVE, COLUMBIA
JAMES BAILEY, MAYOR, COLUMBIA
DON DARDEN, COFFEE COUNTY EXECUTIVE, MANCHESTER
L.L. ISAACSON, MARSHALL COUNTY EXECUTIVE, LEWISBURG
G. RAY WILSON, MAYOR, MOUNT PLEASANT

Chairman HATFIELD. Mr. Claybourne Ross, executive director, Upper Duck River Development Authority.

PREPARED STATEMENTS FROM SENATOR BAKER AND SENATOR SASSER OF TENNESSEE

I have two statements here that I will include in the record at this point. One is from the majority leader, Senator Howard Baker, Jr., and one is from the other Senator from Tennessee, Senator James Sasser. We will incorporate those in the record at this point.

[The statements follow:]

STATEMENT OF SENATOR BAKER

I appreciate this opportunity to reiterate my support for funding for the upper Duck River project which is now approximately 75 percent complete. This endeavor is a major water project under the auspices of TVA which consists of the Columbia Dam and Reservoir, along with the completed Normandy Dam and Reservoir. Once completed, the project will provide major benefits to the citizens of middle Tennessee, including enhanced employment, recreation, water supply, flood control, water quality control, and shoreline development.

I have been a proponent of the project since Congress first appropriated funds in 1969. Unfortunately, it has been the subject of long delays and disputes. The most recent roadblock to completion was the discovery of endangered freshwater mussels present in the Duck River. I am pleased to report, however, that TVA, in consultation with the Department of the Interior, is making great strides with its mussel conservation program. In fact, TVA has recently forwarded documentation to the Fish and Wildlife Service which indicates that the prognosis for success looks good. Should the Fish and Wildlife Service deliver a favorable determination on the success of the program, the project can proceed as planned.

The citizens of the upper Duck River area have been patient these many years, and I am encouraged that their wait is about over. In anticipation of the success of the mussel conservation program, I urge that funds for the project be appropriated so that we can move toward completion.

STATEMENT OF SENATOR SASSER

I regret that I wil not be able to join my friends from Columbia, Tenn.

This is indeed a sad day in Tennessee as we lay to rest former Congressman Joe L. Evins.

Congressman Evins was chairman of this committee in the House of Representatives. It was he who secured approval of funding to initiate the Columbia Dam project.

I shall continue to support completion of this project. Some day in the not-too-distant future, we shall dedicate this completed project—the Columbia Dam—to the memory of Joe L. Evins.

LOCAL PROJECT SUPPORT

Chairman HATFIELD. Gentlemen, you may proceed.

Mr. ROSS. Senator, we are indeed grateful to you to hear our statement. I am Claybourne Ross, executive director of the Upper Duck River Development Association. We bring you greetings from the people in middle Tennessee.

Chairman HATFIELD. Thank you. Since I have my roots in east Tennessee, we are always happy to hear from the Democrats. [Laughter.] As you know, east Tennessee is the fountainhead of all Democrats in the South.

Mr. ROSS. We know you are half Tennessean, and we appreciate that.

Chairman HATFIELD. In fact, Mr. Ross, don't you have quite a list of people who have accompanied you here today? Would they stand up and let us see who is with you?

[Applause; group standing.]

Chairman HATFIELD. Thank you very much. We are happy to welcome all of you. You notice there were a few left to clap in the room after you stood up. [Laughter.]

Mr. ROSS. The Duck River project has had the overwhelming support of the people of the Duck River watershed. We have the support of our Senators, our Congressmen, and early in the development of this project, in fact, we entered into a contract with TVA and the U.S. Government to participate in the construction of the Duck River project, which consists of the Normandy and the Columbia Dams.

The contract called for the payment of $16.2 million by the five water systems in the area that take water from the Duck River. Five cents per 1,000 gallons of water used is collected and put into a trust fund. That trust fund at the present time is $4.5 million. The first payment on this is due in July 1987.

The people feel that this contract for the completion of this project they have performed and are performing their obligation. Failure to complete the project, the Columbia Dam, would be an unpardonable breach of faith.

In the hearing before the State, Federal agencies, and the courts, the project has been proven to be environmentally sound. It will improve the water quality, provide adequate water supply, economic development, and needed flood control, and improve the recreation.

ENDANGERED SPECIES

A listing of the mussel as an endangered species in the Duck River has delayed the completion of this dam and has escalated the cost. TVA and the Department of the Interior entered into an agreement known as the mussel conservation plan to resolve this matter. TVA spent $3 million on mussels. TVA estimates to meet the requirements set forth by the Fish and Wildlife Service to be an additional $8 million.

This is absolutely ridiculous, wasteful, and unnecessary. The mussel is of no economic consequence whatsoever. Exemption to the Endangered Species Act should be granted.

Delays in the Duck River project have resulted from the abuse of environmental laws and regulations. Citizens see the concrete structure, that is the spillway structure, on the dam and cannot understand why this project cannot be completed.

Congress approved the Duck River project and began appropriating funds for it in 1969. Normandy Dam was completed in 1976. The concrete spillway for Columbia Dam was completed in 1981. One-half of the land for the reservoir has been purchased and one-third of the earth is in place.

The things that remain to be done are the diversion of the stream through the spillway; additional earth fill, road, bridge, and utility relocations, and land acquisition.

PROJECT ECONOMICS

The completion of this project is vital to the future water supply of Marshall and Maury Counties. I want to call your attention to the cost-benefit ratio. The project as approved showed a cost-benefit ratio of 1 to 1.3 when it was approved by the Congress in 1969. Since that time, there have been estimates made with reference to the cost, and they, of course, have escalated. But the benefits also escalate in direct ratio to the costs. We contend that it is feasible and makes economic sense.

The current unemployment situation in this area is 12.4 percent. We realize the present budget constraints and appreciate the need to reduce the deficit. The Government and the people of the Upper Duck River watershed have a substantial investment in this project. The people feel that the contract with the Government for the completion of the project, that they have lived up to their part of of the contract and we ask the government to live up to its part.

FUNDING REQUEST

We request up to $40 million for this project. This is TVA's capability. We urge the Congress to give TVA special direction which will clear away the unreasonable, the unnecessary regulations which have caused the delays and escalated cost.

We further urge that the Congress make this appropriation for dam and road construction, utility relocation, and land acquisition. We urge that you make a reasonable appropriation for fiscal 1985 to continue the work of this very worthwhile and very important project, not only to the people of the area itself but also to the State and the Nation.

We thank you, Mr. Chairman.

Chairman HATFIELD. Thank you, Mr. Ross.

Mr. ROSS. Now, I have with me the representative from the Maury County Chamber of Commerce who would like to make a few remarks.

Mr. CHAFIN. Mr. Chairman, Senator Huddleston, I am Bill Chafin, executive director of the Americana Chamber of Commerce. I am speaking for the over 750 members and our board of directors.

We have supported the construction of the Columbia Dam project since its beginning and have demonstrated that support for over 20 years. We have sponsored trips such as this, both to Washington and to Knoxville, to promote it, we have researched the advantages that will accrue to us, and we have conducted letter-writing campaigns.

At the present time, we are contributing 5 cents per 1,000 gallons as a surtax on our water supply for the purpose of completing this project. We consider this monetary contribution to be the consideration in performance of the legal contract on the part of the Tennessee Valley Authority.

We would like to restate our support and urge you and Members of Congress to take immediate action to complete the Columbia Dam within 2 years, if at all possible. We appreciate your consideration. Thank you, sir.

Mr. ROSS. Mr. Chairman, we also have with us today several mayors and county executives. If you will permit, they might say a word.

Judge Rayburn?

Mr. RAYBURN. Sir, I would like to speak to you. I remember you so well.

Chairman HATFIELD. Yes, I remember you, too, Judge.

Mr. RAYBURN. We met under rather unusual circumstances. We came up here with about 400 people—and my wife says don't get too close to this thing, it talks too loud—but you consented so kindly, it wasn't your

Mr. RAYBURN. We love both of you and we appreciate your kindness in listening to us. Howard Baker is helping us. Howard has joined us with great fervor, as he always has. He never left us. So we think the President will join us, we think with your urging.

Thank you most kindly.

Chairman HATFIELD. Thank you, Judge Rayburn. You are an extraordinary witness, very influential.

Mr. DARDEN. Mr. Chairman, Senator Huddleston, my name is Don Darden. I am county executive of Coffee County, Tenn. Coffee is one of the four counties comprising the upper Duck River region.

It was several years ago, as Mr. Ross pointed out, that the Normandy Reservoir was completed. My county enjoys the benefits of the completion of that reservoir. We think that it is vitally important that the other phase of the project, the completion of the Columbia Dam, be completed at the earliest possible date. My county is fully supportive of that effort. We encourage you to fund it.

Thank you.

Mr. ROSS. We also have in the audience County Executive Isaacson.

Chairman HATFIELD. Thank you very much, Mr. Ross. We are happy to hear from all of your people. For anyone who wishes to submit a written statement, it will be incorporated in the record.

Mr. ROSS. Mayor Bailey and Mayor Wilson, I don't know whether they want to say anything or not.

Chairman HATFIELD. Do the mayors wish to say anything?

Mr. ROSS. Mr. Chairman, Senator Huddleston, we certainly appreciate——

Chairman HATFIELD. I think we have a taker here.

Mr. BAILEY. Mr. Chairman, Senator Huddleston, members of the committee, I am Jim Bailey, mayor of the city of Columbia, Tenn., and home of the very county dam we have been talking about for 16 years. We are grateful to you for the support that you have given us in the past. We are looking forward to your support in the future. We have a lot of reasons why we need the Columbia Dam, but the greatest of these reasons is water. We need water for survival of our part of the country. This includes several counties adjacent to Maury County.

A few years ago, had it not been for the dam that we have mentioned earlier, the Normandy Dam, we would have water rationing problems. I believe this was in 1978 or 1979. We would hate to see this happen again, particularly with a dam out there that is over 50 percent complete.

We just feel that this is a necessity just for water alone, much less for flood control, recreation, and the other valuable assets that go along with this project. For the economy, for the country, for industry, and this type thing, we have to have the water to proceed with progress that we would like to have and I think you people would like for us to have.

I want to say again, I appreciate all of the help that you people have given us in the past and hope that you will see fit to help us in the future.

day to do this, but you consented to meet with these 400 people, which I thought was one of the kindest things that has ever happened to us on this Hill. You had a hearing, I mean a first-class hearing. When you got through, you said this was the most unusual project that you had run into because these people were paying part of the cost of this dam, which you thought ought to be done. So we were delighted that you were there.

We have been delighted ever since that you have given us your complete support, as all of your people have.

One thing I would like to call to your mind is the fact that TVA has been willing and—excuse me, Senator Huddleston. I am sorry; I didn't recognize you at the same time.

Senator HUDDLESTON. Don't worry about it.

Mr. RAYBURN. The TVA has been studying——

Senator HUDDLESTON. If you were from Kentucky, I would be a little concerned. [Laughter.]

Mr. RAYBURN. Right next door.

Senator HUDDLESTON. You are a neighbor.

Mr. RAYBURN. And I am on the seven-State TVA board.

Senator HUDDLESTON. You are a good neighbor.

Mr. RAYBURN. You have a very smart man that comes down from Kentucky to the hearing.

Anyway, it is a rather strange thing that the TVA accepted all the criteria we had for some 16 years and then all at once, when one of the members, the former chairman, was going to be removed from his post, after serving his term, all at once, this became a boondoggle, so-called boondoggle. Well, if it was a boondoggle, they had been doing it for 16 years without telling this Congress, and this Congress had looked at it. TVA is the same TVA that built all of these nuclear plants down there that cost hundreds of billions of dollars and then went back to coal plants and said now they are producing electricity with coal just about as cheap as the nuclear could do it.

I am taking too much of your time, but I want to say we have had a bad loss with the death of the Honorable Joe Evins. I am sure you knew him. All of you were acquainted with him. He was one of the finest gentlemen that ever lived.

We had quite a choice of calling this the Joe L. Evins Dam, and Joe did introduce this, or the Mark Hatfield Dam. [Laughter.] So what we are going to do, with your aid and Senator Huddleston's aid, is to find some places up there to call this the Mark Hatfield Dam, this part of it, and we are going to call it Mr. Huddleston's Dam, the other part, and then anybody else that wants to join with this group, and all of these gentlemen that work for you, we are going to name part of it for them. [Laughter.]

Senator HUDDLESTON. By the time this gets through with all of the members of the committee on both sides of the Hill, it will be the longest named dam in history. We will have everybody on it. [Laughter.]

Chairman HATFIELD. Thank you, Mayor Bailey.

Mr. WILSON. Senator Hatfield, I am Ray Wilson, mayor of Mount Pleasant, Tenn. I can't add much to what has already been said here about the Columbia Dam, but just thank you all for coming in and letting us present our program and hope you can help us. All of Maury County is for the Columbia Dam. Thank you.

Chairman HATFIELD. Thank you, Mayor Wilson.

Mr. ROSS. Thank you, Mr. Chairman.

Chairman HATFIELD. Thank you very much, Mr. Ross, and gentlemen.

[The statements follow:]

STATEMENT OF CLAYBOURNE ROSS, ON BEHALF OF THE UPPER DUCK RIVER DEVELOPMENT ASSOCIATION, UPPER DUCK RIVER AGENCY, AND UPPER DUCK RIVER PLANNING COMMISSION

My name is Claybourne Ross. I am Executive Director for the Upper Duck River Development Agency and Association, in which post I have served for many years. I speak for these organizations. The Agency is an official State Agency created to further this project. The Association is a citizen's organization representing some 130,000 people of Bedford, Coffee, Marshall and Maury Counties of Tennessee through which the Duck River flows on its way to the Tennessee River.

We have appeared before your Committee on other years, and we appreciate the interest and helpfulness of this Committee and the Congress in support of the Duck River Project (Columbia and Normandy Dams and Reservoirs, Planning Report No. 65-100-1). This Project has met with the enthusiastic approval and support of the people of the area affected. On their behalf, we thank you. This is the people's project, a very necessary one, and is the key to the development of the area since it will provide flood control, improve water quality, expand recreational facilities, afford a very necessary water supply, increase and enhance job opportunities in the area, and improve the human environment.

The Project has always had the wholehearted support of local governmental agencies, Tennessee General Assembly, the Conservation Commissioner, Governor Alexander and prior governors of the State, Senators Sasser and Baker, Congressmen Gore and Cooper, and, we feel, of the Tennessee Delegation. The Project has long had the support of the Honorable Joe L. Evins, distinguished former member of Congress and one of Tennessee's most respected public servants, and who is well known to your Committee. Local Governmental units, the Association and the Agency have requested that the Columbia Dam be named the Joe L. Evins Dam.

The people of the area have shown their almost unanimous support of the project by appearances at public hearings, the hearings before your Committee and by their willingness to make substantial contributions to the Project.

HISTORY

Shortly after the approval of this Project in 1969, the Office of Management and Budget insisted on applying the Federal Water Resource Act provisions as used in western projects to TVA projects. As a result, there was negotiated a contract between the Upper Duck River Development Agency, TVA and the five cities in the area that have water facility and distribution plants. This contract obligated the Agency and water systems to pay to TVA and the United States Government $16,200,000 as a local contribution for water supply. To accomplish this, the users of water in the five water systems were charged $.05 for every 1,000 gallons of water used beginning in 1972; and these funds have been paid into a trust fund for repayment of the obligation. This fund now amounts to over $4.5 million. Payments are on schedule, and there seems little doubt that the Agency will pay to TVA the first payment of $5,700,000 due under the contract in 1987 (ten years after the closing of the Normandy Dam) and the balance of $10,500,000 when due. The people of the area feel that they have a contract for the completion of this project, that they have performed and are performing their obligations; and that the failure to complete the Project would be an unpardonable breach of faith.

Exaggerated claims made by some few persons opposing the Project have not been proven in hearings before state and federal agencies or courts. The Project is an environmentally sound one and will substantially improve the human environment of the area by providing improved water quality, an adequate and pure water supply, economic development, and a much needed flood control as well as aiding flood control on the Tennessee and Mississippi Rivers, and improving recreation. Since the early 1950's, the Tennessee Department of Public Health, Water Quality Division, or its predecessors, citizens in the area and TVA have worked on and developed a Duck River basin plan, the key to which is the present two-dam project, to provide flow augmentation and improved water quality. Notwithstanding this, several environmental organizations with membership generally outside the area have claimed superior knowledge and have used environmental laws and regulations adopted since the original approval of the Project, such as NEPA, the Endangered Species Act, the Federal Water Quality Control Act and the requirements of the Corps of Engineers that a 404 permit be obtained in an attempt to stop or delay this Project. These attacks have been unsuccessful. The federal courts have held that TVA has complied with NEPA. The Commissioner of Health and the State of Tennessee Water Quality Board have held, after lengthy hearings, that the Project does not violate water quality; and the Corps of Engineers has issued a 404 permit conditioned only on a satisfactory transplant of a subspecies of mussel.

In connection with the TVA Tellico Project, the listing of the snail darter as endangered resulted in unnecessary increase in the cost of Tellico, estimated to be more than $30,000,000. It is now admitted that the snail darter has been found in many other streams and the snail darter is being delisted. The listing of mussels in the Duck River has delayed the completion of the Columbia Dam by years and has escalated the cost. TVA has estimated they have already spent $3,000,000 on mussel transplants to four other rivers. In addition, TVA estimates that to meet the requirements of the Fish and Wildlife Service that an additional $8,000,000 is required for mussel transplants alone. This additional work includes several million dollars for improvements on the Powell River which has no connection with the Duck River Project, other than the fact that mussels have been found in the Powell River. In fact, in connection with the Quadrula intermedia (Cumberland Monkeyface) reports indicate that in the Duck River not more than five have ever been found; in the Elk River not more than three; and in the Powell not more than five. It took 175 man days to find five in the Duck River; in the Elk it took 100 man days to find three; and on the Powell River many man days were required. In connection with the other listing of Conradilla caelata (birdwing pearly), a colony was found in the Duck River near Lillard Mill. These mussels were likewise found in other rivers. From the Duck River Lillard Mills transplants have been made in the Buffalo River, Nolichucky River and the North Fork Holston River, and also a site above the Normandy Dam in the Duck River itself. These transplants from surveys made in May, July and October, 1983, have had various results. It is submitted that the expenditure of over $11,000,000 in connection with the preservation of a mussel probably already extinct (Cumberland Monkey Face) and a mussel that is known to exist in other rivers borders on the ridiculous and is a wasteful and unnecessary expenditure of public money. It is likewise submitted that when the use of the Endangered Species Act escalates the cost of a worthwhole project and causes the unnecessary expenditure of million of dollars, an exemption to the Endangered Species Act should be granted. Had an endangered species listed in connection with the Tennessee Tombigbee Project not be delisted it is probable that that project could have been stopped and the cost greatly escalated.

It is generally recognized that environmental laws and regulations, in many instances, have improved the environment. It is also generally recognized that unreasonable use and abuse of environmental regulations have been extremely costly and have delayed and escalated the costs of this worthwhile project. Delays which have occurred in the Duck River Project have resulted from the abuse of environmental laws and regulations. Except for this, we should be here today inviting you to the celebration of the completion of the Duck River Project rather than requesting more funds to complete the Project. The delays have escalated the costs, and the persons and organizations responsible for these delays and increased costs bear a great responsibility, but, unfortunately, no financial responsibility.

The citizens of this area can see the concrete structure of the Columbia Dam as it stands today and cannot understand why this Project that has been approved and on which there have been so many hearings should be subject to such unreasonable delay and why it cannot be completed. They do not understand how their desires and needs can be so thwarted. They see that there is a hopeless tangle in laws and regulations.

Congress approved the original planning report and began appropriating funds in 1969. It has directed that the Project be completed by 1985. The entire Project is approximately 75% complete. The Normandy Dam and Reservoir was completed in 1976, and is now providing water supply and improved water quality for the towns of Tullahoma, Manchester and Shelbyville. It has aided flood control and improved recreation. The concrete structure of the Columbia Dam was completed in 1981. A photograph of the Dam as it exists today is attached. More than 12,000 acres of the 26,000 acres of land needed have been purchased and cleared. There remains the construction of a dirt fill adjacent to the concrete structure to allow closure. Bridge and pipeline relocation and the purchase of approximately 14,000 more acres of land remain to be accomplished.

Little has been done on the Project from 1980 to date because of litigation and because of the conditions in the 404 Permit issued by the Corps of Engineers requiring successful transplant of mussels. The cost of the Normandy Dam and Reservoir was $37,393,000. So far approximately $81,182,000 have been spent on the Columbia Dam and Reservoir. Expeditious completion of the Project makes economic sense and is in the public interest. The Project will be of great benefit to the area, the State, and will contribute to flood control on the Tennessee and Mississippi Rivers. We have heretofore provided to the Committee statements of the Managers of the Columbia, Tullahoma, Manchester, Shelbyville and Lewisburg Water Systems which clearly show that the completion of the Columbia Dam is vital to the future supply needs of Marshall and Maury Counties. These statements show that without the completion of the Columbia Dam the area could experience a severe water shortage should droughts occur again in the magnitude of the 1980-81 droughts.

Attacks have been made on the Project, claiming that the cost/benefit ratio is inadequate. Recently we have been advised that TVA has stated to this Committee that TVA is so concerned with obtaining funds for its other nonpower projects that the Columbia Dam with TVA has a low priority. We were also advised that some estimates were made in connection with cost/benefits. We do not believe that any official cost benefit study other than the study which justified the whole Project in 1969 has been made. We know the cost escalated for the reasons given. We feel that if benefits are calculated to increase as costs have increased that the whole Project will not be shown to have an inadequate cost/benefit ratio. This Committee's studies have shown that the funds invested in water projects have returned more than the amount of the investment. With the growing population the investment of water projects is a good investment.

In the four-county region the current employment rate is 12.4% of the total labor force. An appropriation for the completion of the Columbia Dam could substantially alleviate this unemployment and improve the economic situation and provide an opportunity for industrial development. A substantial number of people could be put to work almost immediately.

We realize the present budget constraints, and appreciate the need to reduce the deficit. The government and the people of the Upper Duck River Water Shed have a substantial investment in this Project. This investment should not be allowed to go for naught. The people of the area feel that they have a contract with the government for the completion of the Project. They feel that they have lived up to their part of the bargain. We ask you to see that the Government lives up to its part of the bargain.

We urge that Congress give specific directions which will clear away the unreasonable and unnecessary regulations which have caused the delays and escalated the cost of this Project. None of these have been the fault of the local citizens and they should not be made to suffer because of them. We urge that you make a reasonable appropriation to continue work on this Project.

WITNESS LIST—DUCK RIVER PROJECT

Mr. Claybourne Ross, Executive Director, U.D.R.D.A., Shelbyville

Mr. Don Darden, Coffee County Executive, Manchester

Mr. Kenneth Brown, Manager, Gas Department, Lewisburg

Mr. Marshall Ledbetter, Businessman, Columbia

Mr. Ray Floyd, Businessman, Columbia

Mrs. Ray Floyd, Housewife, Columbia

Mr. J. B. Napier, State Representative, Columbia

Mr. Hardin Hill, Retired Engineer, Columbia

Mr. Burt Erwin, Maury County Commissioner, Columbia

Mr. Bill Chafin, Maury County Chamber of Commerce, Columbia

Mr. Ray Davis, Maury County Chamber, Columbia

Mr. Billy Benefield, Maury County Commissioner,, Columbia

Mr. Ed Chumley, Maury County Commissioner, Columbia

Mr. William English, Maury County Commissioner, Columbia

Mr. Fred Greer, Businessman, Columbia

Mr. Athel Hickman, City Councilman, Columbia

Mr. Jack Morgan, City Councilman, Columbia

Mr. C. O. Herston, Individual, Columbia

Mr. Clyde Beard, Banker, Columbia

Mayor James Bailey, Columbia

Mayor G. Ray Wilson, Mt. Pleasant

Ms. Barbara Butler, Businesswoman, Columbia

Dr. L. L. Isaacson, Marshall County Executive, Lewisburg

Mr. Taylor Rayburn, Maury County Executive, Columbia

Mrs. Taylor Rayburn, Housewife, Columbia

Mr. Ralph Maddux, Businessman, Columbia

Mr. Tommy Burns, Industrial Director, Lewisburg

Mr. Arnold Lilly, City Councilman, Lewisburg

Mr. A. C. Sweeney, Office Manager, Lewisburg

Mr. Rufus Knowis, City Councilman, Lewisburg

Mr. Callaway Crunk, City Councilman, Lewisburg

Mr. John Lambert, Businessman, Lewisburg

STATEMENT OF WILLIAM V. CHAFIN, JR., EXECUTIVE DIRECTOR, MAURY COUNTY (TENN.) CHAMBER OF COMMERCE

I am William Chafin, Executive Director of the Maury County Chamber of Commerce. On behalf of the 750 plus members of the Chamber and at the direction of our Board of Directors, I present the following statement.

"The Maury County Chamber of Commerce has supported construction of Columbia Dam since its inception. We have demonstrated our support over the past 20 years through sponsorship of trips to Washington and Knoxville to promote our project, research into the advantages to accrue from the project and letter writing campaigns.

The citizens of Maury County and the Duck River Valley are contributing to the project's cost through a surtax of 5¢ per 1000 gallons on their water supply.

This monetary contribution represents the consideration for performance of a legal contract on the part of the Tennessee Valley Authority.

The Maury County Chamber of Commerce wishes to restate its support for the project and urge the Congress of the United States take immediate action to complete Columbia Dam within two years. We appreciate your consideration of our request."

GEORGIA WATER RESOURCE PROJECTS

PREPARED STATEMENT OF SENATOR MATTINGLY OF GEORGIA

Chairman HATFIELD. Before I call the Oregon witnesses, I want to make part of the record a statement which Senator Mattingly of Georgia has submitted.

[The statement follows:]

STATEMENT OF SENATOR MATTINGLY

MR. CHAIRMAN:

I APPRECIATE YOUR KINDNESS IN ALLOWING ME TO PRESENT FOR CONSIDERATION BY THE SUBCOMMITTEE A SPECIFIC REQUEST WHICH IS OF GREAT IMPORTANCE NOT ONLY TO MY STATE OF GEORGIA, BUT WHICH ALSO HAS A BEARING ON OUR EFFORTS TO INCREASE THE MOVEMENT OF AMERICAN GOODS AND PRODUCTS INTO THE WORLD MARKET.

AS YOU ARE AWARE, THE PORT OF SAVANNAH HAS EXPERIENCED STEADY GROWTH IN EXPORT TONNAGE FOR THE PAST SEVERAL YEARS. YOU ARE ALSO AWARE THAT THE COMPOSITION OF THE WORLD MERCHANT FLEET HAS BEEN CHANGING AT A RAPID PACE, CONCENTRATING ON LARGER, LONGER VESSELS WHICH OFFER SAVINGS IN THE COST OF TRANSPORTATION DUE TO THEIR EFFICIENCIES OF SCALE. OBVIOUSLY, THE LESS UNITED STATES' PRODUCERS PAY FOR TRANSPORTATION, THE MORE COMPETITIVE THEY ARE IN THE WORLD MARKET. SAVANNAH HAS NOT BEEN UNWILLING TO DO ITS PART IN INVESTING IN THE SHORESIDE FACILITIES AND EQUIPMENT NEEDED TO PROVIDE EFFICIENT HANDLING OF OUR GROWING VOLUME OF CARGO. IN THE PAST DECADE, THE GEORGIA PORTS AUTHORITY, STATE AND LOCAL TAXPAYERS AND INDUSTRY HAVE INVESTED LITERALLY TENS OF MILLIONS OF DOLLARS TO PROVIDE THESE MODERN SHORESIDE FACILITIES. UNFORTUNATELY, THE MOVEMENT TOWARD NEW, LARGER AND LONGER VESSELS HAS OCCURRED MUCH MORE RAPIDLY THAN ANYONE EVER ANTICIPATED. NOW MANY PORTS FIND THAT THEIR SHORESIDE INVESTMENTS ARE JEOPARDIZED BECAUSE THE NEWER SHIPS ARE UNABLE TO SAFELY PASSAGE EXISTING NAVIGATIONAL CHANNELS.

I HAVE BEEN INFORMED THAT Yesterday ~~ON MONDAY, APRIL 2~~, THE GEORGIA PORTS AUTHORITY CONCLUDED LENGTHY NEGOTIATIONS WITH UNITED STATES LINES TO DESIGNATE THE PORT OF SAVANNAH AS THE SOUTHEAST ATLANTIC LOAD CENTER FOR THAT CARRIER'S AROUND-THE-WORLD SERVICE. THEY WILL SERVE EUROPE, THE MIDDLE EAST AND SOUTH AMERICAN RUNS FROM THE PORT OF SAVANNAH AND WILL GREATLY INCREASE THE VOLUME OF CARGO FLOWING TO AND FROM THE ENTIRE REGION. U.S. LINES HAS ALSO ORDERED TWELVE NEW JUMBO CONTAINER VESSELS SOME 950 FEET IN LENGTH. THE FIRST OF THESE NEW SHIPS IS EXPECTED TO ENTER SERVICE LATE THIS YEAR. THE LONGEST CLASS OF VESSELS CURRENTLY CALLING AT THE PORT ARE 813 FEET IN LENGTH.

OFFICIALS AT THE GEORGIA PORTS AUTHORITY AND THE SAVANNAH BAR PILOTS HAVE INFORMED ME THAT THE INCREASED SIZE OF THESE NEW SHIPS WILL REQUIRE THE PROVISION OF THREE "BEND WIDENERS" IN THE CHANNEL TO ALLOW SAFE AND EFFICIENT OPERATIONS WITHIN THE HARBOR. THE DREDGING

OPERATION WHICH NEEDS TO BE PERFORMED WOULD PARTIALLY STRAIGHTEN THREE OF THE BENDS IN THE EXISTING CHANNEL TO PROVIDE ADDITIONAL TURNING CLEARANCE FOR THE SHIPS, THUS ALLOWING THEM TO MAINTAIN SUFFICIENT SPEED TO SAFELY NAVIGATE. I HAVE SPOKEN WITH OUR CORPS OF ENGINEERS SAVANNAH DISTRICT ENGINEER REGARDING THIS PROBLEM. HE CONCURRS WITH THE ASSESSMENT MADE BY THE PORTS AUTHORITY AND PILOTS AND INDICATES THAT THE NECESSARY DREDGING COULD EASILY BE PERFORMED IN TIME FOR THE EXPECTED ENTRY INTO SERVICE OF U.S. LINES FIRST 950 FOOT VESSEL IN NOVEMBER OR DECEMBER.

MR. CHAIRMAN, I KNOW THAT YOU ARE AWARE OF THE NEEDS OF MANY OF OUR SISTER PORTS THROUGHOUT THE COUNTRY. I KNOW THAT YOU HAVE NEEDS IN YOUR OWN STATE AT PORTLAND, BONNEVILLE AND OTHER SITES. SO I AM CONFIDENT THAT YOU PERSONALLY APPRECIATE THE NEED FOR THIS IMPORTANT WORK, AND I WOULD URGE YOU AND MY OTHER SUBCOMMITTEE COLLEAGUES TO CONSIDER THIS REQUEST FOR PRIORITY RESOLUTION BECAUSE OF THE TRADE AND SAFETY FACTORS INVOLVED.

THE CORPS OF ENGINEERS HAS ESTIMATED THE COST FOR THE THREE BEND WIDENERS AT APPROXIMATELY $1.5 MILLION. I AM ALSO TOLD THAT THERE MAY BE A NEED FOR A SPECIFIC PROVISION TO BE INCLUDED IN BILL LANGUAGE WHICH WOULD ALLOW THE CORPS TO PERFORM THIS DREDGING OPERATION WITH FUNDS IN THE OPERATIONS AND MAINTENANCE ACCOUNT, AND I AM SUBMITTING SUGGESTED LANGUAGE FOR CONSIDERATION. ALTHOUGH THE COST OF THE WORK IS ESTIMATED AT $1.5 MILLION, I UNDERSTAND THAT THERE MAY BE A POSSIBILITY OF PROVIDING THE MONEY NEEDED FROM WITHIN AVAILABLE FUNDS APPROPRIATED FOR FISCAL YEAR 1984.

AGAIN, MR. CHAIRMAN, I APPRECIATE THIS OPPORTUNITY TO PRESENT THIS MOST IMPORTANT REQUEST FOR THE SUBCOMMITTEE'S CONSIDERATION. I WOULD ASK THAT YOU ASSIST IN EXPEDITING MY REQUEST AND THAT THE SUBCOMMITTEE WOULD TAKE ALL NECESSARY STEPS TO ALLOW THE DREDGING TO BE COMPLETED BEFORE THE END OF THIS YEAR.

LANGUAGE FOR APPROPRIATIONS FOR BEND WIDENERS

The Savannah District of the U.S. Army Corps of Engineers is directed to construct three channel wideners along the north side of the Savannah Harbor navigation channel; these wideners to be located at Stations 59+000 to 63+000, Stations 69+650 to 73+000, and Stations 74+600 to 78+300; at an estimated cost of $1,500,000.

29 March 1984

SAVANNAH HARBOR - BEND WIDNERS
(OPERATION & MAINTENANCE APPROPRIATIONS - O&M)

To construct the 3 bend widners by the end of December, the time desired by Georgia Ports Authority (GPA), will require authorization and funding. We estimate this construction will cost $1.5 million and these funds would be expended between 1 October 1984 and 31 December 1984. Presently we have unexpended FY 84 funds for Savannah Harbor operation and maintenance (O&M) also funds are included in FY 85 for the continued O&M for this harbor. Past experience has shown that the use of O&M funds for this type of new construction is efficient. However, the use of either our present FY 84 or FY 85 O&M funds to construct these proposed bend widners could cause unacceptable problems in our ability to adequately maintain Savannah Harbor. Therefore we believe the best way to proceed is to have additional O&M funds appropriated when this work is authorized.

SAVANNAH HARBOR COMPREHENSIVE STUDY
(GENERAL INVESTIGATIONS APPROPRIATIONS - GI)

We have received a request from Georgia Ports Authority that we delay completion of the Savannah Harbor Comprehensive Study. They wish to make sure that our economic analysis takes account of the rapidly changing composition of the world containership fleet that is now taking place. We have also determined that the modeling and analysis effort on salinity and shoaling changes in Savannah River that would result from harbor improvements and upstream expansion of the port needs to expand in order to acheive meaningful results.

To accomplish this revised study effort requires $600,000. This amount will be used as follows:

(a) $250,000 to revise the economic analysis to include the changes in the containership fleet, reformulate alternative harbor improvement plans, and revise the report and Environmental Impact Statement.

(b) $350,000 for a two-dimensional model and analysis of salinity and shoaling changes in Savannah River.

The most cost effective program for completing the above would use an additional $100,000 in FY 84, $350,000 in FY 85, and $150,000 in FY 86. If no additional funds are available for FY 84, the best program would be $400,000 in FY 85 and $200,000 in FY 86.

BRUNSWICK HARBOR STUDY
(GENERAL INVESTIGATIONS APPROPRIATIONS - GI)

After transfer of $120,000 in FY 84 GI funds into the Brunswick Harbor Study, on March 1, 1984, we began a 12 month reconnaissance study to determine if there is sufficient probability of a deepening project in Brunswick Harbor to warrant more detailed studies. No additional FY 84 funds are needed. In FY 85, assuming sufficient funds, we expect to complete the reconnaissance study and begin a $1.5 million feasibility study. The most efficient schedule requires $350,000 in FY 85 - $30,000 to complete the reconnaissance study and $320,000 to initiate the feasibility study. The basic purpose of the feasibility study is to determine if modification (particularly deepening) of the authorized project is warranted. The administration has proposed a 50-50 cost sharing policy between the Federal government and the local assurer on feasibility studies.

BRUNSWICK, GA AREA WATER RESOURCES MANAGEMENT STUDY
(GENERAL INVESTIGATIONS APPROPRIATIONS - GI)

FY 84 appropriations will be used to develop solutions to water supply problems of the immediate Brunswick, GA area. These solutions will be coordinated with local, State, and interested Federal agencies. An additional $100,000 could be used to complete the water supply studies and prepare an interim report for use by local and State officials to assist in managing the ground and surface water resources of the area. The water supply report could be completed by March 1985. Other study aspects such as flood damage reduction, drainage, recreation, etc. are considered to be of a lower priority and would be completed as funding was made available.

OREGON COASTAL PORT PROJECTS

Chairman HATFIELD. Now, we will turn to the Oregon coastal ports, Mr. Stanley Jud, commissioner, Port of Nehalem; Mr. Knight, commissioner, Tillamook County; Mr. Wilbur Ternyik, secretary, and Mr. Zane Ziemer, president, Port of Siuslaw, and Mr. Thomas Murray, consultant.

Gentlemen, you may proceed as you wish. Your written statements will be placed in the record.

Mr. MURRAY. Mr. Chairman, my name is Tom Murray. I would defer to the elected officials representing their constituencies, please. Mr. Ternyik, secretary of the Port of Siuslaw.

SIUSLAW RIVER AND BAR, OREG.

STATEMENT OF WILBUR TERNYIK, SECRETARY, PORT OF SIUSLAW

Mr. TERNYIK. We will be very brief on this and submit our full testimony.

My name is Wilbur Ternyik. I am secretary of the Port of Siuslaw, Oreg. I am accompanied here today by our port president, Mr. Zane Ziemer.

We are here to support the Corps of Engineers budget request now before you for $8.6 million to continue construction of the Siuslaw River jetty extension project and to support the Corps request of $1,879,000 for operation and maintenance for the channel.

While we are here to support these Corps budget requests, our principal purpose in being here is to say thank you for your continued support of the funding that has made construction of the Siuslaw River jetty extensions possible.

I might say we have been coming here a long time hoping to give that statement.

Two months ago in our area we had an estimate by the Oregon unemployment people of 22-percent unemployment in our area. The contractor at the present time has 100 to 125 people now at work on the job. This employment figure will rise to approximately 200 people during the peak construction months over a 3-year construction period of this project. These are new jobs directly related to the construction of the jetty extension. The past appropriations for this public works project and the jobs bill recently passed by Congress are producing tangible results in increasing employment in Oregon. We are going to be to the point where we are going to be contributing to the national economy rather than receiving.

One of the principal justifications for the jetty extensions is to substantially reduce O&M costs. The Corps Portland District advised us on December 21, 1983, that it is proposing a shift of the south jetty extension 200 feet to the north, narrowing the width between the entrance jetties to effect an improved natural scouring action. The Corps proposal for this change states, "This realinement is intended to cut down the amount of maintenance required."

This additional reduction in annual maintenance dredging, along with the proposed substantial reduction in dredging to result from the jetty extension, should reduce annual hopper dredging requirements at the Siuslaw River entrance to a minimum or, hopefully, to none at all.

We are not too far away from realizing that the improved Siuslaw River navigation project will soon be Lane County's gateway to the sea and a major boon to the economic development of the central Oregon coastal region.

Again, on behalf of all the people living in the port district, we would like to extend our sincere appreciation to this committee for your help. Thank you, Senator.

Chairman HATFIELD. Mr. Ternyik, do I gather then this change in design, of moving the south jetty 200 feet north, will reduce the operation and maintenance costs, and that has the full support of the commission?

Mr. TERNYIK. It has the full support of our commission, that is true.

Chairman HATFIELD. What is the commission doing now, or the community, in terms of programming and planning to get full utilization of this port once the project is completed?

Mr. TERNYIK. We have underway at the current time plans for—and it is down the way because we have to wait for the jetty extensions to be completed—but a new harbor of refuge that would be right next to the ocean there and would save fishermen 50 miles in the trip from Coos Bay, right off the Florence. That is under consideration at this time.

At the same time, serving on the city council as I do, too, we have zoned some property within the city that would be an 80-acre marine industrial site, also close to the mouth of the river, thereby saving on fuel and things for newcomers.

Chairman HATFIELD. Trying to take some bits away from my former hometown of Newport; is that the plan? [Laughter.]

Mr. TERNYIK. No. We are just going to make it a lot easier for the people in Newport, in case of a storm, to survive by coming into a port that is very close. [Laughter.]

Chairman HATFIELD. Thank you very much.

[The statement follows:]

STATEMENT OF WILBUR E. TERNYIK, SECRETARY, PORT OF SIUSLAW, OREG.

Mr. Chairman:

My name is Wilbur Ternyik. I am Secretary of the Port of Siuslaw, Oregon. I am accompanied here today by our Port President, Mr. Zane Ziemer.

We are here to support the Corps of Engineer's budget request now before you for $8,600,000 to continue construction of the Siuslaw River Jetty Extension Project, and to support the Corps' request of $1,879,000 for Operation and Maintenance (O & M).

While we are here to support these Corps budget requests, our principal purpose in being here is to say thank you for your continued support of the funding that has made construction of the Siuslaw River jetty extensions possible.

On July 21, 1983, the Portland District Engineer awarded a $25,260,220 contract for extension of the jetties to Kiewit Pacific Company of Vancouver, Washington. The Kiewit bid was $8,790,330 below the Corps' estimate of $34,050,550.

The jetty construction project is on schedule. The contractor is now working 16-hour days. A huge stockpile of rock is in place at the North jetty construction staging site. A stockpile is also building at the South jetty staging site.

The contractor has 100 to 125 people now at work on the job. This employment figure will rise to approximately 200 jobs during the peak construction months over the 3-year construction period of this project. These are new jobs directly related to construction of the jetty extension. The past appropriations for this public works project and the "jobs bill" recently passed by Congress are producing tangible results in increasing employment in Oregon.

The Corps' fiscal 1985 budget request of $1,879,000 for O & M is the highest annual O & M request ever for annual dredging of the Siuslaw River Navigation Project. Completion of the jetty extensions can't come any too soon.

One of the principal justifications for the jetty extensions is to substantially reduce O & M costs. The Corps' Portland District advised us on December 21, 1983, that it is proposing a shift of the South jetty extension 200 feet to the North, narrowing the width between the entrance jetties to effect an improved natural scouring action. The Corps' proposal for this change states: "This realignment is intended to cut down the amount of maintenance required."

This additional reduction in annual maintenance dredging, along with the proposed substantial reduction in dredging to result from the jetty extension, should reduce annual hopper dredging requirements at the Siuslaw River entrance to a minimum, or hopefully to none at all.

We are not too far away from realizing that the improved Siuslaw River Navigation Project will soon be Lane County's gateway to the sea and a major boon to the economic development of the Central Oregon Coastal region.

We would like here to recognize the outstanding cooperation we have received from the U.S. Forest Service in making royalty-free rock available for this project from its quarry in Mapleton, Oregon 20 miles upriver from the jetty site along with contractor use of Forest Service roads and lands. The State of Oregon has also made State-owned riverside lands available without cost for use in the construction of this improvement project.

Again, we extend our sincere appreciation, especially to this Committee, for helping all who will benefit from the jetty extensions now underway.

Thank you.

NEHALEM RIVER NAVIGATION PROJECT, OREGON

STATEMENT OF STANLEY JUD, SECRETARY, PORT OF NEHALEM

Mr. MURRAY. Mr. Stan Jud, secretary of the Port of Nehalem, and Mr. Shang Knight.

Mr. JUD. Good afternoon, Mr. Chairman, and Senator Huddleston. I will just highlight this because the written portion has been placed in the record.

Our purpose in being here today is, of course, twofold: first, to say thank you for your past assistance in restoration of the Nehalem River jetties; second, we are here to support the Corps of Engineers budget request for your section 107, small navigation projects.

In order to fulfill our responsibilities to ensure use of the large Federal investment in the jetty restoration, we requested the Corps to extend the original authorized 8-foot entrance channel upstream to allow expansion and development of marina facilities under section 107 authority.

The Corps preliminary reconnaissance investigation indicated a channel depth of only 4 feet at mean lower low water, at an estimated dredging cost of $218,000. The cost-sharing on recreational boat use was 51-percent Federal and 49 percent local.

On March 16, the Oregon Land Conservation and Development Commission approved Tillamook County's comprehensive plan which now permits development of a major marina on the river.

We again ask this committee's and your continued assistance in behalf of assuring full utilization of the Federal and local funds invested in the Nehalem River navigation project. Thank you.

Chairman HATFIELD. May I inquire about some of the details of this project. As you know, I made some comments publicly on the occasion of the dedication of the facility, or the jetty, that it seemed to me that an 8-foot channel was certainly justified. In the meantime, I wrote a letter outlining this viewpoint to the Corps, and I received a six-page response from the Corps that would not be considered as satisfactory or in agreement. I plan to recontact the Corps with rebuttal to their letter.

Could you tell me briefly what your view would be if the 8-foot channel is not authorized, or let's say not constructed? That is the basis.

Mr. JUD. It would prevent the proposed marina at the Wheeler site right now. It would not be allowed. They could not develop it. They need the 8-foot channel, 4 feet would not be adequate.

Chairman HATFIELD. In other words, the Tillamook County comprehensive plan, which has been approved, which includes and incorporates that, I understand has been approved by the State.

Mr. JUD. Yes, it has.

Chairman HATFIELD. In that approval, the questions that were raised at one time, environmental questions about dredging, have been satisfied; is that correct?

Mr. JUD. Yes. Oregon in their land conservation and development plan has a mitigation portion which has been taken care of and been passed by the LDC Commission.

Chairman HATFIELD. There are no objections based on the environmental considerations to the dredging of an 8-foot channel.

Mr. JUD. Not any longer; that is correct.

Chairman HATFIELD. Thank you very much.

[The statement follows:]

STATEMENT OF STANLEY A. JUD, SECRETARY, PORT OF NEHALEM, OREG.

Mr. Chairman:

My name is Stanley Jud. I am Secretary of the Port of Nehalem, Tillamook County, Oregon. With me here today is Tillamook County Commissioner, F. E. (Shang) Knight.

Our purpose in being here today is twofold: first, to again say "Thank you", for your assistance in the past in providing appropriations for the 11.9 million dollar jetty restoration work at the entrance to the Nehalem River, Oregon, navigation project. .

Second, we are here to support the Corps of Engineers' budget request of $9,875,000 for Section 107 - Small Navigation Projects, with the hope that we can share in a comparatively small portion of that budget appropriation for completion of a navigation channel on the Nehalem River.

In order to fulfill our responsibility to ensure use of the large federal investment in the jetty restoration, we requested the Corps to extend the original authorized 8-foot entrance channel upstream to allow expansion and development of marina facilities under its Section 107 authority.

Except for one relatively small shoal area between the ocean and marina sites, existing and proposed, the Nehalem has natural channel depths in excess of the 8-foot navigation channel proposed.

The Corps' preliminary reconnaissance investigation under its Section 107 authority indicated a channel depth of only 4 feet at mean lower low water, at an estimated dredging cost of $218,000. The cost sharing on recreational boat use was 51% federal and 49 % local.

The taxpayers of the Nehalem Port District have already paid 50% of the cost of the original jetty construction - a cost that was substantial for such a small number of property owners at the time.

Restoration of the entrance jetties and state approval of a major marina development on the Nehalem River were major obstacles in economic development in our area. With your help the jetty restoration obstacle was promptly overcome once you became aware of it.

The second major obstacle was overcome several weeks ago, on March 16th, when the Oregon Land Conservation and Development Commission approved Tillamook County's Comprehensive Plan which now permits development of a major marina upstream from the shoal area. This is the shoal that restricts navigation of the river.

We again ask this Committee's assistance in support of the Section 107 funding now budgeted and your continued assistance in behalf of assuring full utilization of the federal and local funds invested in the Nehalem River Navigation project. Thank you.

ADDITIONAL STATEMENTS SUBMITTED

Mr. MURRAY. Mr. Chariman, I have submitted three statements for the record. The statements are from the Port of Brookings, the Port of Gold Beach, and the Port of Umpqua, which respectfully include the Chetco, Umpqua, and Rogue Rivers. All three support the budgeted items. Two of those statements point out that the cost of O&M has escalated substantially in the last year or so. The Port of Gold Beach has asked for a minor addition to the budget to resume a general investigation study.

I think that is about all the time we would want to take. I think the judge from Tennessee perhaps expressed as well as we could express the kindness and support you have always given.

I think I would make one additional comment and that concerns the equity with which you have considered all projects throughout the United States, not just those in Oregon. Thank you.

Chairman HATFIELD. Thank you, Mr. Murray.

[The statements follow:]

STATEMENT OF KEITH WILKINSON, CHAIRMAN, PORT OF BROOKINGS, OREG.

Mr. Chairman, my name is Keith Wilkinson. I am chairman of the Brookings Port Commission, the sponsor of the Federal navigation project on the Chetco River, Oreg.

The Port of Brookings supports the Corps of Engineers fiscal 1985 budget request for $866,000 for annual operation and maintenance of the Chetco River navigation project. The Corps' 1985 budget request, which is essentially for maintenance dredging, is the largest budget request ever presented to Congress for operation and maintenance of the Chetco River project.

The fiscal 1985 budget request for $866,000 is over double the $383,000 appropriated for operation and maintenance for fiscal 1984. This increase in annual cost points up the need to complete construction of the authorized modification of the Chetco River navigation project which will correct the existing uneven jetty system at the river mouth. The uneven jetties directly contribute to the increasing high-cost annual maintenance dredging requirement.

Reduction of annual maintenance dredging is one of the principal economic benefits to be derived from correcting the uneven entrance jetty system at the river mouth.

The Corps of Engineers' feasibility report that recommended authorization of the jetty extensions indicated that modification of the Federal project would reduce maintenance dredging by an estimated $108,000 per year. The Corps' fiscal 1985 dredging cost is now over six times greater than the estimated annual Federal savings in maintenance dredging shown in the Corps' feasibility report.

In August 1983, the Oregon Department of Economic Development completed an economic evaluation of the Brookings area and concluded that the Port of Brookings, with its no-bar ocean access, is one of the major factors supporting the economic base in the Brookings area. The reduction, or elimination, of annual maintenance dredging is critical to maintaining that economic base.

We ask your continued consideration of our needs. Thank you.

STATEMENT OF EDWIN K. HIRTE, PRESIDENT, PORT OF GOLD BEACH, OREG.

Mr. Chairman, my name is Edwin Hirte. I am president of the Port of Gold Beach, Oreg.

The Port of Gold Beach supports the $1,003,000 of operation and maintenance funding requested in the Corps of Engineers' budget for fiscal 1985.

We ask the committee to consider adding the Corps capability of $90,000 to resume its study of the Rogue River navigation project. The Corps' estimated cost of this authorized navigation study is now $868,000.

We also ask that Congress direct the Corps of Engineers to conduct additional dredging of the sand infiltration into the Gold Beach harbor that results, in some measure, from the Corps' design of the Federal navigation project on the Rogue River.

Sand shoaling of the Rogue River navigation project has been a serious problem ever since the Federal navigation project was completed in 1961.

In October 1961, the same year the Federal navigation project was completed, the Port of Gold Beach wrote the Corps of Engineers of its concern about the sand shoaling in the entrance between the jetties and the resulting hazards to navigation.

The Corps prestigious tidal hydraulics committee reviewed the project and recognized the shoaling problem at the river entrance in its report of March 1970.

The Corps' Waterways Experiment Station at Vicksburg, Miss., completed a hydraulic model investigation report on the project in August 1982. The report on this investigation consisted of approximately 535 pages of findings, tables, water profiles, and photographs of plans tested.

A supplemental report of approximately 60 pages, dated June 1983, was forwarded to the Port of Gold Beach on September 13, 1983. The Corps' Portland District has not yet provided the Port of Gold Beach with its evaluation of these model study reports.

In early 1983, the Corps' Portland District proposed construction of an L-shaped longitudinal timber-pile dike parallel to the south jetty between the twin-jettied entrance from the ocean as an experimental structure to try to stop the infiltration of sand into the harbor.

The public notice on the proposed longitudinal dike was published on April 22, 1983. The solicitation for bids was cancelled and another public notice was issued on July 15, 1983. The second notice changed the design from a singular L-shaped longitudinal structure to a three separate timber-pile dike structure which would be perpendicular to the south jetty.

The Corps' sudden change in design of the experimental dike structure is illustrated by the dates of the schematic drawings presented here.

Construction on the experimental three-pile dike began in the fall of 1983 and is less than 10 percent complete today. Meanwhile, the infiltration of sand into the harbor has restricted use of the Gold Beach boat basin and related facilities.

The Corps of Engineers acknowledged the sand shoaling problem in its last public notice on the pile dike structure in this quote relating to the purpose of the dike: "Purpose: The proposed timber pile dike is intended to control the upstream migration of a sand bar which has in the past few years annually blocked the entrance to the boat basin located south of the navigation channel near river mile 1. The sand bar also migrates into the boat basin requiring the Port of Gold Beach to dredge large volumes of material to maintain adequate depths in the boat basin."

The $1,003,000 budgeted for fiscal 1985 does not provide for dredging of the sand that migrates into the boat basin.

Since the sand infiltration into the port's harbor area (outside the Federal navigation channel) results, in large part, from the obvious deficiency in Federal design of the river entrance jetty system, we feel the removal of this large volume of sand should be a Federal responsibility. Accordingly, we ask the Congress to direct the Corps to do this dredging.

Thank you.

STATEMENT OF DAVID MORGAN, PRESIDENT, PORT OF UMPQUA, OREG.

Mr. Chairman, the Port of Umpqua supports the $898,000 of operation and maintenance funding requested by the Corps of Engineers' budget for fiscal 1985. These funds are essentially for hopper dredging at the mouth of the Umpqua River.

There is still a need for more than the Corps' presently scheduled hopper dredging at the mouth of the Umpqua River. There remains the need to remove a part of the large shoal still existing between the jetties.

The Corps' completion of the extension of the Umpqua River training jetty in October 1980, has caused a self-scouring action at the river mouth which has provided a deeper entrance channel than has ever existed.

However, the Corps has yet to complete its three-phase plan for the Umpqua River entrance as recommended by its tidal hydraulics committee. The recommendations in the tidal hydraulics committee's 1975 report consisted of: (1) restoring the north jetty; (2) extending the training jetty; and, (3) the entrance channel be redredged to a more central location between the jetties to reduce the large shoal on the north half of the entrance, which the committee felt was a source of material for channel shoaling.

While the entrance channel has been reoriented, the large shoal area between the 1,800-foot wide entrance, commonly referred to as the middle grounds, has not yet been dredged to the degree necessary to allow the self-scouring channel action to maintain an adequate channel width without the Corps' annual maintenance dredging.

The Corps' Portland District predredge and postdredge hydrographic survey of 1983, documenting channel depths, reveal that shoal material from the north is encroaching on the designated and dredged navigation channel.

The appropriated funds for dredging of the Umpqua River entrance should provide for additional hopper dredging of the entrance to complete the recommendations of the Corps' tidal hydraulics committee for reducing the large shoal on the north half of the entrance.

We appreciate the assistance of this committee over the years in providing the funds and direction for completing the improvements which lessen the hazards to navigation and now permit year-round commercial use of this navigation project.

Thank you.

INCREASING OPERATIONS AND MAINTENANCE COSTS

Chairman HATFIELD. Mr. Murray, let me ask you a question. Am I correct in observing that the operation and maintenance costs of Corps projects have in the last decade, let's say, escalated at a higher rate than inflation would account for?

Mr. MURRAY. Yes, sir. I believe up until this last year, and I don't know what their inflation rate is this past year, but they have been up in the 7-percent bracket on some of the construction escalation figures.

Chairman HATFIELD. Why?

Mr. MURRAY. I don't know that I could answer that. I think perhaps there is more overhead involved in the amount of work being done than should be done, sir.

Chairman HATFIELD. Is there a general decline in construction areas of the Corps activity, generally speaking? We are talking about our region out in the West.

Mr. MURRAY. Yes, sir. If you would go back 10 years—and I am sure your memory would recall vividly—the figures in new work, general construction, as opposed to operation and maintenance, have perhaps flipped almost 180 degrees. Whereas the new construction work was paramount, today most of that overhead is coming out of the operation and maintenance area, there is no new work in the pipeline to speak of, and that is where the engineering generally should come from, as most engineers would know, from the upfront construction work. Now it is coming from O&M.

COST SHARING OF O&M EXPENSES

Chairman HATFIELD. Then would I be correct in making an observation that perhaps we ought to look at the overall Corps budget as to whether or not operation and maintenance should be bearing this overhead expense, especially when we talk in terms of cost-sharing of operation and maintenance, as in a fee system that has been advanced by the administration, or especially in that context? Would you agree we ought to be able to identify just who is carrying the overhead or the overall Corps budget and whether that overhead is being disproportionately borne by operation and maintenance as against construction, and why we ought to be even more reticent to embark upon a fee system of local cost-sharing until we have that particular point clearly in mind?

Mr. MURRAY. Could I break the answer down in two sections, Mr. Chairman? I think by all means the Congress should look at where the overhead is placed, without any question.

As to cost-sharing, those of us on the smaller port scale understand it needs some help. There has to be a protection of small ports on cost-sharing. The small ports in the United States, particularly in Oregon and in other States, are for all practical purposes broke. No one knows better than you the need for debt reduction in the United States as a whole. But coming back to water resources, and more particularly navigation projects, cost-sharing on O&M, on small ports—and I will speak directly to the State of Oregon—would, in effect, kill those ports. The cost-sharing has to be an equitable distribution to protect everyone in the United States if there is to be cost-sharing, sir, in my judgment.

Chairman HATFIELD. Well, I think you raised an interesting point because we have had no authorization legislation for 7 or 8 years in the Corps program. So, obviously, the overhead is being shifted gradually.

Mr. MURRAY. Yes, sir.

Chairman HATFIELD. Certainly, it is evident that it is being shifted from what was formerly borne in the construction program now to a disproportionate amount being borne by the operation and maintenance programs. Is that a fair assessment?

Mr. MURRAY. As a consultant, without making a study, I would say it is a fair assessment, sir. [Laughter.]

Chairman HATFIELD. Are you hoping for a study? [Laughter.]

Mr. MURRAY. I think the subject should be studied, without question, sir, by those who are aware of what is really going on. Thank you.

Chairman HATFIELD. Thank you.

Mr. Knight?

NEHALEM BAY NAVIGATION PROJECT

Mr. KNIGHT. Thank you, Senator. I guess this is going to be my swan song in front of you. I am finishing my 16th year as a county commissioner representing Tillamook County.

I want to say in behalf of the citizens of Tillamook County, we are most appreciative of your cooperation and understanding of the needs both at Tillamook Bay and Nehalem Bay.

I would say I think Mr. Jud covered our points very well, but I would like to say that in Tillamook County now we have over 16-percent unemployment. We have reduced our county payroll almost 50 percent in order to survive. We have been badly hurt by lower timber revenues. But even with those drastic cuts, within the last year we have formed an economic development committee within the county trying to help ourselves.

Now on this Nehalem Channel, you asked Mr. Jud about the need for 8 feet. What we are trying to do is to entice water-dependent and water-related development related to small boat harbors that is set aside on the Nehalem Bay estuary for development. Unless we have an 8-foot channel, there is no way that we can entice these kinds of people to come into our stream. We must have the depth that is authorized at 8 feet at the mouth. We have one shoal in between that during low water you can put on your hipboots and walk clear across the bay. There is just no way. And 4 feet isn't going to be our answer. It has to be 8 feet.

I think with the amount of money that the Federal Government has spent out there and the restoration of the jetties, if we are going to utilize it, we have to be able to have the depth in order to fulfill all the requirements.

We certainly appreciate your understanding of our situation. It has been very nice working with you and meeting with you. I hope to see you in Oregon in the not-too-distant future.

Chairman HATFIELD. Thank you. It has been a pleasure working with you, too, Commissioner.

What would you say from a safety factor and/or from a use factor that we can use this 3- to 4-foot channel for? What can we do with that 3 to 4 today? As I understand, that is what it is now. What kind of craft?

Mr. KNIGHT. What kind of craft?

Chairman HATFIELD. Yes.

Mr. KNIGHT. Well, we might have some canoes [laughter] and something along that line. But even now, with the way it is, the outboard motors strike bottom when they go out at low tide. To me, it would be a waste of time for a 4-foot channel. I would say it has to be 8 feet or you are just spinning your wheels. I don't see any alternative.

Chairman HATFIELD. Do you recall the cost of the jetties project we just completed?

Mr. KNIGHT. Yes. It was $11.9 million.

Chairman HATFIELD. $11.9 million to develop jetties for canoes is what you are saying?

Mr. KNIGHT. Right.

Chairman HATFIELD. For canoes.

Mr. KNIGHT. Well, that wasn't our intention. [Laughter.] Somewhere along the road we have been given a roadblock. That is what we are trying to break.

As you know, the original construction of the jetties was paid half by the citizens of that port commission in gold coin. The understanding was that the Federal Government would maintain the jetties from there on out. This was just a restoration of the twin jetties that were constructed as per agreement.

Chairman HATFIELD. What would be the estimate, about $1 million to provide an 8-foot channel?

Mr. KNIGHT. We will do better than that. I would say not over $600,000.

Chairman HATFIELD. Then it really doesn't make much economic sense to put almost $12 million on those jetties, although that was the Federal Government's responsibility from the beginning, unless we make greater use of that harbor.

Mr. KNIGHT. You are absolutely right. That is why we are asking for the 8-foot channel. We want to be able to utilize it to its fullest extent. I don't see how we can do it with less than 8 feet. We have that one shoal that we have to take out.

Chairman HATFIELD. You want something between the canoe and the El de France.

Mr. KNIGHT. That is right. [Laughter.] In our deal with LCDC on our comprehensive plan, we have established the spoil sites. They have been approved. They are all built in where we can. The dredging can be done, and we have the approved sites.

We will still have a few hoops to jump through, of course, with Fish and Game and those other agencies. But we have won the consent of the LCDC by a vote of 5 to 1, which we think was tremendous.

Chairman HATFIELD. I would settle for that kind of a margin.

Mr. KNIGHT. Pardon?

Chairman HATFIELD. I would settle for that kind of a margin. [Laughter.]

Thank you.

Mr. MURRAY. Thank you very much, Mr. Chairman.

ELK CREEK LAKE, OREG.

STATEMENT OF ANNE BASKER, CHAIRPERSON, ROGUE BASIN FLOOD CONTROL AND WATER RESOURCES ASSOCIATION

ACCOMPANIED BY:
DENNIS HOFFBUHR, TREASURER
BOB LEE, SECRETARY

Chairman HATFIELD. Next, we will hear from Anne Basker, chairperson; Dennis Hoffbuhr, treasurer; and Bob Lee, secretary of the Rogue Basin Flood Control and Water Resources Association.

Ms. BASKER. Thank you, Chairman Hatfield. We are grateful to be here.

You have mentioned the members of our group: Bob Lee, to my left, who is secretary of the organization; Dennis Hoffbuhr, to my right, the treasurer, at the end of the table is George Proctor, who is president of the National Water Resources Association and frequently represents the Governor of the State on water projects. We are very pleased to have him with us.

If you forgive me, at the outset I would like to say I feel a little bit as though I am singing the second chorus of the Tennessee Waltz, because a number of the points that were made by the group from Tennessee are included in our testimony today, specifically the cost-benefit ratio which they discussed.

BACKGROUND

As you are aware, the Rogue basin project, was approved by the Congress in 1962, as a three-dam system, three multipurpose dams. Two are in place—Lost Creek completed in 1977 and Appelgate Lake completed in May 1981. Both installations are operating at great effectiveness and with better benefits than any of us had originally dared to hope.

NEED FOR ROAD RELOCATIONS

Our current request is for the completion of the Elk Creek Lake component of the project. It is particularly urgent this year because of a safety crisis which is in Jackson County. At or near the proposed dam site the roads, as you remember, have not been maintained because of the fact that property has been acquired since 1974 and there is really nobody in charge. Because of continued delay and because the Federal Government owns the land, nobody is maintaining them. The bridges and roads are being used by logging equipment and other kinds of traffic at considerable lack of safety. So the urgency of doing something with the road has been requested by both the Jackson County court and by other members of our delegation, and those that lives in the area.

You are aware that in addition to the property that has been acquired, the Corps has a stockpile of gravel necessary for completion of the project and that they are suggesting the funds which would be needed for 1984 construction to be estimated at $4.6 million and an additional $7 million in the following year, 1985, to complete the relocation of the road and get things underway.

I don't have to remind you that the national economic recovery isn't as complete in our part of the State of Oregon as it is elsewhere in the Nation. A Federal project like this one, even a small road project, would be enormously important to the unemployed people in our community where unemployment is 13.9 percent in Dennison County and Jackson County.

We have included in our testimony a variety of other items which I refer you to in your own time. I would hope that you have some questions for our group. We would be glad to respond to those.

HYDROELECTRIC POTENTIAL

There is renewed interest from the Jackson County government in the possibility of power generation at the dam, that the soil and water conservation district has reemphasized the benefit-cost very much higher than anyone had anticipated, that we have increasing development and so forth along the river, increased visitors to the area.

BENEFIT-COST ANALYSIS

There we are on the matter of the benefit-cost ratio again. The cost escalations continue without any kind of recalculation of the benefits portion of the equation. So, the benefit-cost ratio comes out uneven. An example is the 400,000 visitors who have come to the completed projects in the past year. According to Oregon's Travel Bureau's 1982 figures, this kind of visitation would provide $19.30 a day in economic benefits. Elk Creek, unfortunately under the Corps' analysis, labors under the $1.25 per day assignment designation that was made as part of the project.

We keep coming back here asking for completion of the project. The need has not changed. We would like to remind you of your own statement made to the local press when you became chairman of the Appropriations Committee, that you want to complete the Rogue basin dams, and we certainly want very much to do so as well.

We will be glad to try to respond to questions, Senator.

One thing I would like to point out, because you mentioned last year what appeared to be some diminution of local support, these statements from the board of commissioners in Josephine County, from the city of Grants Pass, from the fruit growers league, from the Jackson Soil and Water Conservation District, from all kinds of civic and social groups, entirely in the area, many municipalities, all in support of the project. I would like to leave those with you. They are addressed to you.

Chairman HATFIELD. We have received some of those letters ourselves. We will incorporate for the file the remaining group of letters.

Ms. BASKER. You will continue to hear from people, I think, sir.

[The statement follows:]

STATEMENT OF ANNE G. BASKER, CHAIRMAN, ROGUE BASIN FLOOD CONTROL AND WATER RESOURCES ASSOCIATION

Mr. Chairman, members of the committee, thank you for the opportunity to appear before you once again in support of the funding for the final phase of the Rogue River basin project in southern Oregon.

In 1962, under Public Law 87–874, Congress authorized the Rogue basin project which was to include three multipurpose dams. Of these, Lost Creek Dam was dedicated in June 1977 and Applegate Dam was dedicated in May 1981. Both installations are operating even more effectively and with greater general benefit than any original estimate.

Our current request for completion of the Elk Creek component of the project is unusually urgent because of the safety crisis which exists in Jackson County at and near the proposed dam site. As some of you may recall, all property acquisition for this dam was completed by 1974, after which delays began, and now culminate in a no man's land of unmaintained logging and general use roads and bridges that are severe safety hazards. Even if county maintenance or construction funds were available, which they are not, it is clearly imprudent to rebuild a road or bridges which will be under water when the project is complete.

In addition to the property acquired for the dam, the Corps has the necessary gravel stockpile and completed road relocation plans which could be activated for this summer's construction season, with completion in 1985. Funds needed for 1984 construction are estimated at $4.6 million with an additional $7 million for 1985 to relocate the 6½ miles of county road involved.

Since the national economic recovery has not quite caught on throughout Oregon, a

Federal project like the road relocation could be a real boost to our unemployed, currently 13.9 percent in Josephine County and 10.9 in Jackson County.

Just as the road design is complete and ready to go to bid, so also the dam's redesign, using roller compaction construction techniques, is complete and funding could mean startup of construction within a matter of 2 or 3 months.

Other recent developments relative to this project which constrain us to ask for full construction funds as soon as possible include:

(1) Renewed interest from Jackson County (government) in power generation at Elk Creek Dam.

(2) A report by the Jackson County Soil and Water Conservation District indicating that the annual economic impact to Jackson County, based upon irrigation benefits from Elk Creek Dam alone, is $4,469,750. To the State of Oregon as a whole, the benefit is $5,363,700.

(3) Constantly increasing development of the Rogue River which has added to the value of property (and to the number of people) subject to flooding in future years if the dam is not completed. (That issue—flood control—is, of course, the major concern of those in Grants Pass and Josephine County for whom Elk Creek Dam supplies a large part of the required area flood control.)

(4) Corps reports of 400,000 visitors to the Lost Creek and Applegate recreation sites in 1983. Oregon's Travel Bureau estimates approximately $19.30 per day (1982) as the economic impact of those visitors. (Elk Creek's cost-benefit estimate in the area of recreation remains at the ridiculous 1957 figure of $1.25 per visitor-day!)

You have heard from our delegation every year since the original 1962 congressional authorization of this project. While we appreciate your courtesies and attention, it is our fond hope that action this year will make it decreasingly necessary for you to expect us for very many more appropriations subcommittee hearings on this economically feasible final phase of our Rogue basin project.

The local press, in celebrating Senator Hatfield's appointment to the chairmanship of the Senate Appropriations Committee in 1980, quoted him as saying: "So we're going to continue and complete those projects that I have gotten underway—port projects, the lock at Bonneville Dam, and the Rogue Valley projects—I want to complete those dams."

We hope fervently for that same outcome. Thank you for your attention. We will be happy to respond to questions.

PERTINENT DATA--ROGUE RIVER PROJECT

Feature	Unit	Applegate	Elk Creek	Lost Creek
Stream		Applegate River	Elk Creek	Rogue River
County, State		Jackson, Oreg.	Jackson, Oreg.	Jackson, Oreg.
Dam location		Sec. 25, T40S, R4W, WM	Sec. 19, 20, 29, & 30, T33S, R1E, WM	Sec. 26, 27, & 34 T33S, R4W, WM
River mile above mouth	Mile	45.7	1.7	153.6
Drainage area	Sq. mi.	223	135	674
Airline distance from Medford	Mile	23.0 southwest	27 north	26 north
Airline distance from Portland	Mile	255 south	205 south	205 south
Usable storage	Acre-feet	75,000	95,000	315,000
Inactive storage	Acre-feet	6,990	5,750	120,000
Dead storage	Acre-feet	10	250	30,000
Total storage	Acre-feet	82,000	101,000	465,000
Elevation—Maximum (full) pool	Feet, msl	1,987	1,726	1,872
Elevation—Minimum flood control pool	Feet,msl	1,889	1,665	1,812
Elevation—Minimum floor control pool	Feet, msl	1,854	1,581	1,751
Area—Maximum pool	Acre	988	1,290	3,430
Area—Minimum flood control pool	Acre	360	710	2,580
Area-minimum conservation pool	Acre	205	200	1,820
Length—Reservoir	mile	4.6	6.2	10
Elevation—Top of dam	Feet, msl	1,994	1,729	1,882
Length of dam	Feet	1,300	2,598.5	3,750
Maximum height—Riverbed to top of dam	Feet	242	249	327
Embankment volume	Cu. yds.	3,000,000		10,800,000
Concrete volume	Cu. yds.	86,000		110,000
RCC			1,100,000	
Conventional			94,000	
Spillway control gates (Tainter)	Number	2	3	3
Spillway design discharge	Cfs	93,800	68,400	158,000
Outlet works		Multiple-use intake structure, outlet tunnel, flip bucket	Multiple-use intake structure, outlet conduits, flip bucket	Multiple-use intake structure, cut and cover outlet conduit, flip bucket
Outlet capacity at maximum and full pool	Cfs	6,100	7,400	11,500
Outlet slide gates (oper. and emerg.) number	(Sets)	2	2	2
Outlet temperature control (various elevations)		Multiple level intake	Multiple level intake	Multiple level intake
Power	kW	None	None	49,000
Project cost (estimate)		$91,572,000	$111,000,000	$136,113,000
Cost to date (2/29/84)		$91,572,000	$11,863,000	$136,113,000

Letter From John S. Billings, Chairman, Jackson Soil and Water Conservation District

March 26, 1984

Robert F. (Bob) Smith
U.S. House of Representatives
1416 Longworth Building
Washington, D. C. 20515

Dear Sir:

In addition to my personal response to your inquiry regarding agriculture the Jackson Soil and Water Conservation District Board of Directors has requested that a reply be sent on their behalf. Following are their major concerns.

1) Targeting of USDA Conservation Programs

A) The policies of the National Association of Conservation Districts (NACD) and the Oregon Association of Conservation Districts (OACD) have been to support the targeting concept of responding to serious conservation, providing that funds, etc. NOT be taken from successful on-going programs. NACD and OACD both support the concept that all Soil and Water Conservation Districts (SWCD's) retain a good base program and that targeting or emphasis programs be financed with additional funds according to documented needs.

B) Both Soil Conservation Service (SCS) and the Extension Service have experienced staff reductions during the past two years while the targeting concept has been in effect. SCS in Oregon has gone from a manpower ceiling of 225 in 1982 to 179 in 1984 - a 20% reduction. The Medford SCS field office has declined from five in 1981 to 2.6 in 1984 - a 48% reduction in staff and this reduction occurred during the same period that the Medford field office was designated as a target area for irrigation emphasis. During the period that the Medford field office has been working as a targeted area for irrigation emphasis, the available staff time for irrigation emphasis work has declined 62%. Targeting is not working well for our district because SCS's response to irrigation has declined, response to erosion problems has declined, activities in rangeland improvement have diminished, and their information and educational work has dropped to nil.

2) ~~Support of~~ Elk Creek Dam

A) This dam project should be supported because our district lists such projects as goals in our NRCP, OACD supports upstream storage, and the USDA has adopted upstream storage and flooding as one of the conservation programs priorities.

B) The annual economic impact to Jackson County, based upon irrigation benefits by Elk Creek Dam alone, is $4,469,750. To the state as a whole the benefit is $5,363,700. These figures are based upon estimated farm gate sales totaling $1,787,900. Oregon State University agriculture economists use a 2.5 multiplying factor for counties and a 3.0 factor for state-wide benefit calculations. It must be stressed that the Elk Creek Dam is part of a 3 dam authorized project. Without Elk Creek Dam irrigation water storage, most of the irrigation benefits assigned to water presently stored in Lost Creek dam, cannot be feasibly utilized. The Sam's Valley Irrigation Project needs water from both storage sites to be feasible and neither site can supply enough water for a feasible project alone. The annual economic impact of losing irrigation benefits from both sites is $11,762,500. to the county and $14,115,000 to the state.

C) The two dams on line have demonstrated their abilities to control downstream flooding. The additional control offered by Elk Creek Dam is needed.

D) Water Quality - The two dams on line have demonstrated their excellent ability to receive poor quality water laden with sediment and discharge good clean water downstream. Jackson SWCD has several years of records of inflows and outflows from these dams documenting turbidity, temperature, and flows.

3) Support Sams Valley Financing Efforts

A) I request that you intervene and help the Sams Valley Irrigation District organization to find good low cost money to finance their project to realize the economic benefits listed above.

4) Rangeland Improvement

A) I ask your support to assist with the rangeland improvement efforts in Jackson County. We have 100,000 acres plus of low elevation rangeland that is producing 300-400 pounds of forage (0.5 AUM's). These acres could be improved through seeding and management to produce 3,000 pounds ofr forage (4 AUM's). Side benefits will be noxious weed control and water quality improvement.

B) You can help by supporting:
   1) More cost-share money for this effort
   2) More SCS and Extension Service staff for this effort
   3) Research by Oregon State University and others to determine best methods of establishment and management of rangelands and grazable woodlands.

Your serious consideration and support of the above matters will be greatly appreciated and will benefit this county and the state of Oregon.

Thank you.

Sincerely,

John S Billings

John S. Billings
Chairman, Jackson SWCD

encl.

CC: Vernon Gebhard - Sams Valley Irrig.Dist.
Cal Krahmer - Pres. OACD
Charles Liles - Admin. Div.Soil & Water
Jack Kanalz - St.Consvt., SCS
Jerry Latham - Rogue Basin Assoc.
Larry Cauble - Jackson County Stockman
Ron Mobley - Extension Service
Ed Weber - Dist.Consvt., SCS
~~Bob~~ Lee - County Water Adv. Committee
Dennis Hoffbuhr - Chamber of Commerce

1133 S. Riverside, #18
Medford, Oregon 97501

April, 1983

ELK CREEK LAKE MASTER PLAN for RESOURCE USE COMMENTS

GENERAL COMMENT: Please update benefits commensurate with todays prices.

IRRIGATION BENEFITS: The Sams Valley Irrigation District desperately needs full season irrigation water for 16,000 acres of pasture, hay, field crops, and orchards. Without Elk Creek Dam water storage this project will not be feasible. It is estimated that 38% of the irrigation water needed for this project will be stored in Elk Creek Dam and Lake and 62% in Lost Creek Dam.

Crops produced by this water, in addition to present crops grown in Sams Valley, will have a farm gate sales value of $4,705,000 at 1983 prices. $1,787,900 of this total is attributed to the water stored in the Elk Creek Dam. Supplemental water will be supplied to additional acres and will increase farm gate sales an estimated additional $500,000.

FLOOD PREVENTION: Several times this year and last year Elk Creek has substantially contributed to high waters downstream in the Rogue River. There has been extensive damage to pump stations, extensive erosion damage to Rogue River banks, and considerable buildup of gravel bed load into areas that is creating a pending hazard to public facilities. Two examples of facilities that will soon be damaged are Touvelle Bridge and Jackson County's Touvelle Park. Lost Creek Dam has dramatically demonstrated how effectively flood damage can be reduced through regulated water releases. We need Elk Creek Dam control!

SEDIMENTATION: Several times this year, and at least twice last year, Lost Creek Dam and Applegate Dam have demonstrated how effectively sedimentation can be controlled within the impoundment areas. During flood conditions only clear water is being released from these dams. Furthermore, the quality of water within the impoundments has not been downgraded. I often fish in Lost Creek Lake and have always found the water to be of very good quality. Some bank erosion from waves caused by speeding boats is occuring but the Corps of Engineers is correcting these problems. Elk Creek discharges large amounts of sediment. We need the kind of sediment control in Elk Creek that Applegate and Lost Creek offer.

UPDATE TO 1983 Farm Prices:

7,200 acres at $220.00/acre =	$ 1,584,000
500 acres at $2000/acre =	1,000,000
2,700 acres at 350.00/acre =	945,000
5,600 acres at 210.00/acre =	1,176,000
Total Value Farm Gate Sales	$ 4,705,000
Lost Creek Dam (62%) =	$ 2,917,100
Elk Creek Dam (38%) =	1,787,900

Edward E. Weber
District Conservationist

Jackson Soil and Water Conservation District

February 10, 1981

Jackson County Water Resource Advisory Committee

Presented at Public Meeting February 10, 1981

The Jackson Soil and Water Conservation District has authorized me to provide your committee with information regarding the value of irrigation water stored in the Lost Creek-Elk Creek reservoir system. This information was developed by a district sponsored committee consisting of Dave Lowry, Sams Valley orchardist; Dalton Straus, Sams Valley diversified farmer; Jay Carr, county Extension agent; Ed Weber district conservationist for the Soil Conservation Service; and Roger Borine, SCS soil scientist. This study was presented to the JSWCD board and the board forwarded the information on to the U.S. Army Corps of Engineers on April 1, 1980.

This committee felt that the $93,000 annual irrigation benefits identified in the Elk Creek February 1980 EIS is very misleading and does not present an adequate evaluation of irrigation waters supplied by this reservoir. They used the proposed Sams Valley Irrigation District as an example to demonstrate the value of irrigation waters.

Following is a summary of their report:

Soils:

Soils in the Sams Valley area vary greatly. Approximately 45% of the irrigable acres are mostly Brader-Debenger soils, and are suited to hay and pasture, and production will be increased by 2 tons of hay per acre. Approximately 20% of the acres are Medford, Evans, Ruch, and Kerby soils. These are suited to a wide variety of crops, and production can be increased by $200 to $2,000 depending upon the crop. Thirty-five percent of the soils are clayey, will require drainage, and are suited to hay and pasture. Production will be increased by 2 tons of hay per acre after irrigation and drainage.

Estimated Annual Value of Increased Production on 16,000 Acres:					1982 values
7,200 acres	Hay and Pasture @ ~~$149~~ 170.00/Ac.	(1)	=	$1,008,000	1,224,000
500 acres	Orchards, Nuts @ $2,000/Ac.	(2)	=	1,000,000	1,000,000
2,700 acres	Diversified Crops @ $250/Ac	(3)	=	675,000	675,000
5,600 acres	Requiring Drainage @ ~~$140~~ 160/Ac	(1)	=	784,000	896,000
16,000 acres	Total Increased Crop Values			$3,467,000	3,795,000

Their study reflects crop values realized from the use of 56,000 acre feet (4) of water, with 62% of the water supplied by Lost Lake and 38% supplied by Elk Lake. (Allocation percentages provided by WPRS and COE). On the basis of this allocation, 38% of the Sams Valley's increased crop production value, or $1,317,450, could be assigned to the Elk Creek system.

The addition of irrigation water to the Sams Valley 16,000 acres will provide direct annual crop values of $1,317,460 to the Jackson County economy. The Elk Creek EIS does not adequately address the true value of irrigation water and this Sams Valley example is being provided to better understand the true value of irrigation waters to a community. $1,442,100 A82 Value.

(1) Based upon on-farm 1980 value of hay @ $70.00/ton

(2) This figure assumes there will be adequate water for frost control.

(3) Includes the value of such crops as corn ensilage that can only be grown with irrigation. Expect 20-25 ton/acre ensilage @ $16.00/ton, 2 tons/ac. increase in grain production @ $100,00/ton

(4) 16,000 acres X 3.5 acre feet/acre = 56,000 acre feet. Calculated from 2.5 average annual crop needs plus an estimated 20% delivery loss to equal 3.5 acre feet.

Sincerely yours,

Ed Weber

Edward E. Weber, District Conservationist
Jackson Soil & Water Conservation District

cc: John S. Billings, Chairman, Jackson SWCD

April 1, 1980

Colonel Terence J. Connell, District Engineer
U.S. Army Corps of Engineers, Portland District
Post Office Box 2946
Portland, Oregon 97208

Dear Colonel Connell:

Our district has reviewed the February, 1980 Draft EIS for the Elk Creek Dam Project and we are disturbed with references to irrigation benefits. We feel these are too low.

Our district organized a committee to study possible benefits from irrigation in the Sams Valley area only. Difficulties with analyzing the Water Power and Resources Service's data for the entire Medford Division are the reasons for restricting our comments to the Sams Valley area. Our committee consisted of a Sams Valley orchardist, Dave Lowry, Sams Valley diversified farmer, Dalton Straus, Jackson County Agent, Jay Carr, District Conservationist, SCS, Ed Weber, and Soil Scientist, SCS, Roger Borine. Their findings are endorsed by us and are as follows:

On page (5) item 2, Water Supply and Irrigation: We disagree with the first paragraph. It states that "no secondary facilities are presently planned", when, in fact, several are planned. Sams Valley Irrigation District has presented a feasibility report to their district and are working on an engineering design to apply water to approximately 18,000 acres. They have an overwhelming approval from potential water users within the district. The Sam-Rock Water District is working on a plan to irrigate 900 acres in the west end of the Sams Valley area. Also, the cities of Medford and Grants Pass are developing plans for expansion of their municipal systems. More accurate research should be conducted and then this item rewritten to reflect true conditions.

On page (4), Table 1, Annual Irrigation Benefits are listed as $93,000. We feel this figure is way too low.

Soils in the Sams Valley area vary greatly. Approximately 45% of the irrigable acres are mostly Brader-Debenger soils, and are suited to hay and pasture, and production will be increased by 2 tons of hay per acre. Approximately 20% of the acres are Medford, Evans, Ruch and Kerby soils. These are suited to a wide variety of crops, and production can be increased by $200 to $2,000 depending upon the crop. 35% of the soils are clayey, will require drainage, and are suited to hay and pasture. Production will be increased by 2 tons of hay per acre after irrigation and drainage.

The committee's estimate of Sams Valley irrigation benefits to 16,000 acres are summarized as follows:

Increased Production Benefits by Irrigation

7,200 acres of Hay and Pasture @ $149.00/acre (1) =	$ 1,008,000
500 acres of Orchards and Nuts @ $2,000.00/acre (2) =	1,000,000
2,700 acres Diversified Crops @ $250.00/acre (3) =	675,000
5,600 acres with Drainage @ $140.00/acre (1) =	784,000
Total Gross Benefits	$ 3,467,000
Less Delivery Charges (4)	- 640,000
Less Storage Costs (5)	- 112,000
Total Annual Net Benefits	$ 2,715,000

(1) Based upon on-farm 1980 value of hay @ $70.00/ton.
(2) This figure assumes there will be adequate water for frost control.
(3) Includes the value of such crops as corn ensilage that can only be grown with irrigation.
(4) Expect 20-25 ton/acre ensilage @ $16.00/ton, 2 tons/acre increase in grain production @ $100.00/ton.
(4) Based upon $40.00/acre ammortorized figure supplied by Bob Blanton, consulting engineer, for Sams Valley irrigation.
(5) Based upon $2.00/acre foot for 3.5 acre feet/acre. Figures obtained from W&PRS.

Our study reflects benefits from the use of 56,000 acre feet of water. We understand that 62% of this water could be supplied by Lost Creek but the balance of 38% would need to come from Elk Creek. On the basis of this allocation $1,031,700 of Sams Valley benefits could be assigned to Elk Creek Dam and $1,683,300 assigned to Lost Creek Dam.

Sams Valley Irrigation District alone identifies benefits far beyond the $93,000 annual benefit figure listed in your EIS. We feel this figure should be increased to at least include our estimated Sams Valley benefits of $1,031,700. By so doing, the cost benefit ratio would become 1.46 to 1.

Sincerely yours,

John S. Billings
Chairman

JSB

cc: John Edwards, AC, SCS, Albany
Charles Liles, Dir., St. Comm., Salem
Jay Carr, Ext. Svc., Medford
Dave Lowry, Orchardist, Medford

Senator Mark O. Hatfield
Hart Senate Building
Washington D.C. 20510

Dear Senator Hatfield:

Thank you for your continuing support of the Elk Creek Dam Component of the Rogue Basin Project.

Please continue working for this project which is both needed and wanted by the people of the Rogue River Valley.

Dawne Fox
Ruth D. Acklen
Ruth S. Melvin
Lucille McGregor
Grace M. Blanchard
Dorothy L. Rumbly
Virginia Collins
Juanita R. Clark
Amanda M. Clark
Fred E. Hanson
Eleanor Lefler
Ennis Bronson
Juanita E. Clark (Nita)
Fran Pfuffer
F. Mayk Panter

Arline Johnson
Carol Banks
Kathy Krause
Margaret Milbank

W Ward Green
Gloria J. Green
4425 Gales Rd
Medford Oregon

Etta Theis
1308 SE 'N' ST.
Grants Pass, Ore.
97526

Sincerely,

Evelyn P. Bristol
Name

Pres. Jo Co Republican Women
Organization

5000 Rogue River Hwy.
Address
Grants Pass Or.

Harold L. Haugen
Etta Theis
Josephine Johnson
Connie Thrasher
Joan Morgan
Jessie M Rau
Edna Britton
Ruth Kutz

Etta Theis

Gladys Di Palma
Name

Rep Womens Club
Organization

R J Ritchey
Name

Roxy Ann Grange #792
Organization

Met-One Inc. – DeWane E. Johnson

Riverside Conf. Center – Carol Van Gordon

Glenn C. Weldon, President
Beaver All-State Chapter
Oregon Division, Izaak
Walton League of America
731 N.W. Midland Ave
Grants Pass, OR 97526

Colonial Bank Russel E. Boden R. Boden
First Interstate Guy Hamiton
Dan Goodhall
First ~~Interstate~~ John Anhorn
Hope Kelly HopeKelly
J. V. Basker

ESPER C. SILVESTER
Name

PHOENIX GRANGE #779
Organization

6764 TARRY LANE.
Address
TALENT OREGON 97540

THIS WAS BROUGHT UP ON THE FLOOR AND DISCUSSED MARCH 13, 1984. WE STILL FEEL THIS DAM IS VERY MUCH IN NEED. THE ONE AT LOST CREEK AND THE ONE AT APPLEGATE ARE DOING A VERY FINE JOB. I ALSO FEEL THAT IT IS TIME TO LOOK CLOSE AT THE BUDGET AND GET ON AN EVEN KEEL. NOT BY RAISING TAXES BUT THROUGH ECONOMIC SPENDING LIKE I DO HERE AT HOME WAEK I GO OVER BUDGET.

Esper Silvester

Iona M. Ritchey
Name
Roxy Ann Grange #792
Organization

Ray Bennett
Name
Roxy Ann Grange #792
Organization

Betty Jett
Name
Gold Hill Grange #534
Organization

Lee Jett
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Organization

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State Rep #49
Organization

Adolfo Zanotto
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James M. Duff
Name

Josephine Reed
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Member of
Roxy Ann Grange #792
Organization

Rotary Anns 3-13-84
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Yvonne Lindholm
924 N.W. Starlite Pl.

Pearl Rice
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Karen Madsen
1679 Virginia Ln

Kay Brashears
721 Amelia Dr.

Mary C. Fann - Rogue River

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Kendee Spence
1011 NW Starlite

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Name

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Frances E Watts
Name
Rogue River Civic Club
Organization

1921

Marjorie N. Varner
Name

Retired Educators
Organization

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Jessie M Renn 3000 Jump Off Joe Rd
Marcia K. Lidman
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Marian L. Howe
Robert G Howe
Eileen Cook
Warren M Cook
Jesse Lefler
Lettie Huffer
Marguerite Hawthorne
Esther Bender 235 NE Savage
Lorraine Cattanach
Betty Clark

Loyd C. Morrow
Susie A. Morrow
Justeena Schenk
Arlene Dunne
Lorna Hanson
Izetta B Fischer
Baldwin S Fischer
Grace K. Van Fleek
Martha M. Nelson
Elsie M. Jerdine
Inis A. Joiner
Mildred V. Whicello
M. Dorothy Grosh
Ada Lawman

Susie Halstead
James H. Cornett
Alice L. Cornett
Stella M. Drake
R. Davis Ponting
Esther Fox

Jane Pete
Esther D. Hoover
Merle H. Woodward
Gordon L. Arrenton
Louise Christensen
Mildred Palmer
Bertena Hill
Ashley Foerst
M. Dorothy Grosh
Margaret H. Ponting

Beth Van Gordon
Name

A J McKillop
Margaret L. McKillop
Name

Edythe Andrews
Name

Lula Belle Dickerson
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Evelyn Moats 724 NE Memorial Dr. Grants Pass, OR. 97526
Inger O. Hansen 711 NW Lynwood Pl Grants Pass
Esther H. Hansen, 711 NW Lynwood Pl Grants Pass

Florence Price 3058 Lower River Rd. Grants Pass OR
Eugene D. Price 2088 Lower River Rd. Grants Pass, Or.
Eleanor G. Fleming 232 N.E. Steiger
Emily Benson - 504 NW Elm Grants Pass Ore

Jessie Holsinger - 460 Rancho Vista Dr. G.P.
Bessie Kerlinger 1352 Shady Ln GP Or
Helen Nandie 708 Grandview G.P.

1922

Leonard Andrews
Name

R.B.A.
Organization

Edith Heidenreich
Name

R.R. Civic Impt Club
Organization

Louis A Wagner
Name

R. B. A.
Organization

Eugene F Kirkham
Name

Soil Water Conservation
Organization
Jackson County

Jack M Vaughan
Name

UPPER ROGUE GRANGE
Organization

Walter C Bauer
Name

GRANTS PASS ROTARY CLUB
Organization

Paul Brandon
Name

Ronald B Brown
Name

John G Gates
Name

Jack G. Hoffbuhr
Name

George Doney
Name

Shady Cove Rotary Club
Organization

Robert T Shockley
Name
Legislative Chairman
Jackson County Farm Bureau
Organization

George Doney
Name

Shady Cove Civic Association
Organization

Beulah Irwin
Name

Rogue River Civic Club
Organization

Margaret M. Meehan
Name

Rogue River Civic Club
Organization

Robert T Shockley
Name

Bear Creek Valley Sanitary Auth.
Organization

Barbara A Humbird
Josephine County Treasurer

Naomi Brookston
Name

Rogue River Women's Club
Organization OFWC

Joan M. Doney
Name

[illegible]

Statement of Bruce M. McGregor, Mayor, Grants Pass, Oreg.

The Council of the City of Grants Pass is quite concerned that the third leg of the Rogue Basin Flood Control Project may not be constructed as had been anticipated when the project was established in 1962. Of the three components, the Elk Creek Dam will provide the greatest flood benefit to our community, one which has experienced severe flooding at least once every 20-25 years.

We believe the project was well-conceived in 1962; and, we have been pleased with the progress to date. It is now time to fulfill the commitment made 22 years ago to our community. Please withdraw any objection you may have to the Elk Creek Dam component and, in fact, support its construction in a proper and timely manner.

Statement of William F. Ford, Vice Chairman, Josephine County (Oreg.) Board of County Commissioners

The Josephine County Board of Commissioners appreciates and continues to solicit your on-going support of the prompt completion of the Elk Creek Dam as an intregal part of the Rogue River Basin Project, which the Congress of the United States previously approved.

Josephine County has been involved in and supportive of this entire project since its inception. We continue to stress the vital benefits which would be derived: flood control/ augmenting low waterflows, meet future demands for irrigation, municipal and industrial water supplies and meet recreational needs---and alot more!

We would like to refer to the miles of deteriorating roadways and bridges in the area of the Elk Creek Dam project. These roads and bridges facilitate heavy log truck travel, which of course is vital to our area's economy. We urge federal support for the completion of the by-pass road around the dam site and the necessary bridge construction.

Your support of this project is deeply appreciated and please be assured of Josephine County's continued earnest support.

Statement of Duane Culbertson, President, Fruit Growers League, Oregon

The Fruit Growers League and Medford Pear Shippers strongly support Elk Creek Dam.

The Rogue River area has 10,000 acres of fruit, principally pears, of which 6,500 acres are heated to protect against spring frost. 2,500 of these acres are protected with over-tree sprinklers and 2,500 acres by burning oil and 1,500 protected by wind machines.

The fruit industry and its expert advisers agree that over-tree sprinklers are the only practical method of frost protection.

Suitable soil for pears is scarce in our area but there is a sizeable acreage of soil in Sams Valley that would be suitable for pear production if water was available for irrigation and frost protection. With Elk Creek Dam there would be a storage of agriculture water to irrigate 10,000 acres in the Sams Valley area.

The many benefits of the multiple purpose dam project are too numerous to mention but include flood control, and 2,000 acre feet for exchange with Talent Irrigation District to allow Immigrant Lake water to dilute Ashland sewer treatment plant affluent in Bear Creek, and also, reduction of sedimentation of river water.

The survival of the Medford pear industry, which produces 10% of all the pears in the U.S. and brings approximately $20,000,000.00 of new money into our area each year, is dependent upon the completion of Elk Creek Dam.

PROJECT SUPPORT

Chairman HATFIELD. Are there other comments you gentlemen wish to make at this point, or should I begin the questions?

Mr. HOFFBUHR. No, sir; you can go ahead with the questions.

Chairman HATFIELD. Just to recap a moment, the project, as you know, as you know, became sidetracked in 1974 on the basis of the water resources board of the State withdrawing its support for the project. We had all kinds of challenges made to the project. We completed the studies, et cetera. So now as I understand the current situation, the Governor is in support, the water resources agency of the State is in support, the local Congressman is in support, the total legislative delegation from the area is in support. You have these other individual and organizational letters of support. I would assume by that that there is broad-based public support in the local area.

Ms. BASKER. Very definitely, sir, yes. As you say, there is a great deal of it here. Both the county government in our area and the city of Grants Pass, as well as citizens along the Rogue River in Jackson County, continue to support the project.

Mr. HOFFBUHR. Congressman Bob Smith, if I may point out, did a survey of the people in his district and found 75 percent of them supported construction of Elk Creek.

Chairman HATFIELD. Would you comment on the recent reanalysis that was ordered by the Corps and why so much of the reporting in that reanalysis indicates that the benefit-to-cost ratio has fallen below unity? In fact, the first inquiry I had was while I was in Medford, and I had a press person track me down with the announcement and I had not seen this unfavorable reanalysis.

CORPS REANALYSIS OF PROJECT ECONOMICS

As you know, the reanalysis looked at Elk Creek from both the original act of a systemwide benefit-cost ratio and then extrapolated that to just Elk Creek alone.

Why do you think there was such wide misunderstanding about the reanalysis?

Mr. HOFFBUHR. Mr. Chairman, again, if I might answer that, I think that it was a case of whoever was reporting on the document did not read the entire document. The Corps was directed, I believe, to analyze the project in a number of different ways, and there were a number of different benefit-cost ratios which were generated by the different approaches. But I think the conclusion of the document is, and it is pretty well stated in there, that the project as authorized as a system by Congress, and, additionally, at the authorized discount rate, which was also mandated by Congress, as the only way the Corps lawfully can analyze this project—when analyzed under those guidelines, it has a 1.3-to-1 benefit-to-cost ratio. Other ones are basically meaningless.

Chairman HATFIELD. Do you wish to make a comment?

Ms. BASKER. Just that the entire report was released before our organization had received a copy of it, or before the Congressman from our district who had requested the study had received a copy of it. So, we were in a difficult position to try to respond at that point, just as I am sure you were, sir, when you were confronted by a reporter without having seen the completed report.

Chairman HATFIELD. As you know, the administration does not support this project. It is a little difficult to understand precisely why. I indicated I think it would be prudent to initiate as soon as possible necessary reevaluation of the benefits of this project as a last added element in a larger system of reservoirs. It is very well camouflaged, the idea communicated in that sentence. Then it talks about budget restraints and so forth.

But interestingly, the administration's position paper does not precisely come down on the reanalysis as an excuse for nonsupport of the project. I think that is further evidence that that reanalysis was misinterpreted or not fully read, as you indicated, Mr. Hoffbuhr, or somehow was greatly misunderstood as to what the reanalysis said or did not say. What we are saying here is simply if the goalposts remain in the same position as when the game started—does the benefit-cost ratio support construction of the project as authorized. That benefit-cost ratio is what?

Mr. HOFFBUHR. The Corps figure is 1.3 to 1.

Chairman HATFIELD. Thank you very much.

Ms. BASKER. Thank you, Senator.

BONNEVILLE POWER ADMINISTRATION CONSERVATION PROGRAMS

STATEMENT OF RON MILLER, PRESIDENT, NORTHWEST NATURAL GAS CO.

Chairman HATFIELD. Ron Miller, president of the Northwest Natural Gas Co.

Mr. MILLER. Mr. Chairman, I am pleased to have an opportunity to talk to you today. I did want to say that I have prepared a full statement with some accompanying charts that I will ask to appear in the record as if delivered today. But then, with your permission, I would like to summarize briefly for you our main points. Then I would be happy to answer any questions you might have following that.

[The statement follows:]

STATEMENT OF RON MILLER, PRESIDENT, NORTHWEST NATURAL GAS CO.

BPA's fiscal year 1985 budget for conservation programs includes several programs that are not cost-effective and interfere with the competitive choices energy consumers would otherwise make with respect to alternate energy sources. Instead of reducing electric usage, these programs promote uneconomic fuel switching. The Pacific Northwest natural gas industry recommends that Congress delete from BPA's budget $43.4 million requested for the following programs: Solar and Heat Pump Water Heating, New Home Construction, Commercial Energy Audit, Commercial Financial Incentives, New Commercial Buildings, Industrial Energy Audit, and Sponsor-Designed Acquisitions.

The region's natural gas industry supports energy audits. We are contributing our dollars to provide decision makers with cost and efficiency comparisons so that model standards can be approached with all the facts. We are in opposition to energy audits that are followed up with public subsidies to market more electricity.

The Pacific Northwest faces a substantial surplus of electric power that is forecasted by BPA to continue until the early 1990's. Congress should not fund conservation programs that do not meet the cost-effective criteria of the Regional Act. The seven programs we urge Congress to cut are two to seven times more expensive per average megawatt saved than BPA's basic residential weatherization program. (See attached Table 1.) Considering the current and projected surplus, BPA should not spend federal funds to acquire high-cost conservation savings.

The natural gas companies serving the Pacific Northwest believe that many BPA programs that were originally proposed to conserve electricity are now being promoted to assist electric utilities in retaining or increasing market share. Electricity competes directly with natural gas in many markets, including residential and commercial space heating and water heating, and industrial boilers. Under the guise of conservation, the programs we urge Congress to cut provide subsidies which encourage consumers to choose electricity over competing forms of energy. Such subsidies increase rather than decrease the use of electricity in the Pacific Northwest. Furthermore, the programs encourage fuel switching which is not cost-effective when measured against life-cycle costs of natural gas equipment.

Programs intended to promote electric energy conservation should not provide consumers with incentives to use electricity rather than a competing energy source. The programs we are urging Congress to cut from BPA's budget interfere with normal marketplace economics of competing fuels. Market signals of the relative prices of competitive fuels should govern fuel choices, not federal subsidies.

The programs we urge Congress to cut were excluded from BPA's projected FY '85 budget used to establish BPA's wholesale power rates for FY '85. BPA excluded the programs because they were not considered to be cost-effective conservation. The present Congressional budget submittal includes $38.6 million in requests for conservation acquisition programs that were added after the BPA rate proceeding. However, BPA now proposes $31 million in cuts for budgeted residential weatherization even though residential weatherization is BPA's most cost-effective conservation program. (See attached Table 2.) This is not a prudent reallocation of conservation dollars. If BPA has determined that it is prudent to cut $31 million from residential weatherization, Congress should require BPA to spend those funds on programs that are less expensive per average megawatt saved.

BPA previously stated that the commercial sector conservation programs they are now requesting funding for are not prudent given the projected power surplus. In the recent rate proceeding a BPA witness stated, "The commercial programs have been discontinued because of the short measure life of conservation actions under those programs." 1983 Wholesale Power Rate Proceeding, Exhibit BPA-14, p. 4. It is a waste of federal funds and contrary to prudent utility practice to purchase conservation savings that will only be realized during the projected surplus. If the region again faces projected deficits, such programs may become cost-effective, but they should not be funded now.

BACKGROUND

This material has been prepared by the natural gas distribution companies and the pipeline serving the states of Oregon, Washington and Idaho. The companies that prepared this information are Cascade Natural Gas Corporation, CP National Corporation, Intermountain Gas Company, Northwest Natural Gas Company, Northwest Pipeline Corporation and Washington Natural Gas Company.

Natural gas service is available to 77% of the population in the Pacific Northwest. Natural gas is available to 77% of the population in Washington; 76% in Oregon; 82% in Idaho; and 81% in Western Montana. As of 1983, the natural gas industry served about 900,000 customers in the Pacific Northwest region, of which 785,000 were residential.

There is a tendency in the Northwest to think of electricity as the primary energy source. However, the results are surprising when energy from BPA's electricity sales in the Pacific Northwest is compared with natural gas supplied to the region. In 1980, a representative year, natural gas supplied the energy equivalent of 82 billion kilowatt hours for the Northwest. BPA sold 68 billion kilowatt hours in the region in that same year. In 1980, gas supplied 21% more energy than BPA in meeting the region's energy demand.

Natural gas is making an important contribution to meeting the region's energy demand in a cost-effective and environmentally-sound manner. If market forces are allowed to send proper price signals, future utilization of natural gas can reduce the need for expensive new electric generating capacity in the region. The proper energy policy for the region is to use the right energy for the right job, specifically by using natural gas in lieu of electricity for water and space heating in those applications where natural gas is more efficient and less costly to the consumer.

Natural gas is a reliable energy source today and for the long-term future in the Pacific Northwest. Northwest Pipeline brings gas into the region from many diversified sources of supply. Domestic natural gas supply areas include the San Juan Basin area in the Four Corners region of the southwestern states, the Piceance Basin, and the Green River Basin, and the Big Piney area of Wyoming. Northwest Pipeline's Canadian gas volumes are exported by

Westcoast Transmission Company from the Provinces of British Columbia and Alberta, comprising about 40% of the total gas supply for the region.

Northwest Pipeline has ample supply to meet natural gas demands in the region today and in the foreseeable future. Pacific Northwest gas distributors have over seven trillion cubic feet of proven gas reserves tied to the existing system. Presently the pipeline has proven reserves under contract that can serve natural gas demand in the region for 23 years at current growth rates in consumption, and this figure has been increasing each year as more reserves have been added to the pipeline's supply than were consumed. There is no region in the United States that has anywhere near this reliable a supply of gas available for the future. This dependable, long-term gas supply will mean extremely competitive future prices. Even if Congress were to deregulate prices for existing gas contracts, the impact on the Pacific Northwest would be minimal.

During the development of the Northwest Conservation and Electric Power Plan, our companies presented a detailed review of the role natural gas can play in the region's energy future. The Two Year Power Plan, which serves to guide Bonneville's conservation program and hence its budget, fails to recognize the fact that natural gas is an efficient and cost-effective energy source for many essential end uses. The Power Plan has given rise to serious concern on the part of the gas industry that many recommendations will not conserve electricity, but instead will disturb the consumer's market choices between energy sources and will promote the use of electricity where that energy may not be the most efficient and economic source. Our companies filed *Cascade Natural Gas Corporation v. Evans*, Civil No. 83-7358, *in the Ninth Circuit* Court of Appeals to challenge the Power Plan because of provisions that interfere with market choices between fuels and foster the promotion of electricity sales rather than conserving electric energy.

TABLE 1

RELATIVE COST EFFECTIVENESS OF BPA CONSERVATION PROGRAMS
COST PER AVERAGE MEGAWATT SAVINGS

Program	FY '85 Estimated Cost	FY '85 Estimated Saving (aMW)	Cost per Avg. Megawatt
Residential Weatherization	$73,530	88.3	$ 832,000
Solar and Heat Pump Water Heating	6,690	3.4	1,967,600
New Home Construction	5,490	2.5	2,196,000
Commercial Energy Audit	5,480	2.4	2,283,333
Commercial Financial Incentives	11,860	3.0	3,953,333
New Commercial Buildings	3,070	0.4	7,675,000
Industrial Energy Audit	2,590	0.6	4,316,666
Sponsor-Designed Acquisitions	8,230	2.2	3,740,909

COMPARISON OF BPA'S FISCAL YEAR 1985 CONSERVATION PROGRAMS
1983 RATE PROCEEDING AND CONGRESSIONAL BUDGET REQUESTS
BUDGET LEVELS AND MEGAWATT SAVINGS
(In Thousands of Dollars)

Program	FY '83 Actual Expenditures	FY '84 Estimated Expenditures	1983 Rate Proceeding 1/		BPA Congressional Budget Request 2/	
			FY '85 Est. Budget	FY '85 Est. Energy Savings (avg. MW)	FY '85 Est. Budget	Est. Energy Savings (avg. MW)
Residential Programs						
Residential Weatherization (including Water Heater Wrap Program)	$135,233	$ 86,360	$104,588	110.4	$ 73,530	88.3
Conventional Water Heating	17,832	0	0	0	0	-
Solar and Heat Pump Water Heating	290	3,140	0	0	6,690	3.4
Appliance Efficiency	0	110	0	0	330	.2
New Home Construction	918	12,300	0	0	5,490	2.5
Residential Pilot Programs	3,265	250	7,500	0	0	2.0
Commercial and Indus. Programs						
Commercial Light & Water Htg.	2,842	0	0	0	0	2.9
Commercial Energy Audit	0	5,240	0	0	5,480	2.4
Commercial Financial Incentives	0	2,100	0	0	11,860	3.0
New Commercial Buildings	0	2,890	0	0	3,070	0.4
Industrial Energy Audit	0	520	0	0	2,590	0.6
Irrigated Agriculture	968	2,130	0	0	3,100	2.3
Sponsor-Designed Acquisitions	0	3,880	7,500	3.0	8,230	2.2
Commercial Pilot Programs	0	0	21,585	0	0	0
Public Agencies and Customers						
Street and Area Lighting	30,787	5,240	7,000	11.25	7,660	12.8
Institutional Buildings	9,504	7,330	7,000	11.25	8,270	13.0
Assistance for States and Local Governments	4,189	5,490	0	0	9,810	0
Customer System Efficiency	1,524	730	0	0	330	0
Pilot Programs	0	0	12,500	0	0	0
Program Development	16,466	26,690	23,200	0	31,260	3.5
TOTAL ALL PROGRAMS	$223,818	$164,400	$190,873	135.9	$177,700	139.5

1/ Source: Bonneville Power Administration, Loads and Resources Study, Table O-2, p. 127 (September, 1983).

2/ Source: Bonneville Power Administration Budget as Submitted by U. S. Department of Energy, p. BP29.

TABLE 3
OVERALL EFFICIENCIES OF NATURAL GAS AND ELECTRICITY FOR SPECIFIED END-USES

End Use	Primary Resource Conversion Efficiency 1/		Point of Use Seasonal Efficiency 2/		Overall End-Use Efficiency
Space Heating					
ELECTRIC					
Resistance	33%	X	.98	=	32%
Air to Air Heat Pump	33%	X	1.74	=	57%
NATURAL GAS					
Standard Gas Furnace	88%	X	.65	=	57%
New Generation Gas Furnace	88%	X	.83	=	73%
Pulse Combustion	88%	X	.93	=	82%
Water Heating					
Electric	33%	X	.91	=	30%
Natural Gas	88%	X	.65	=	58%
Clothes Drying					
Electric	33%	X	.65	=	21%
Natural Gas	88%	X	.65	=	58%
Cooking					
Electric	33%	X	.75	=	25%
Natural Gas	88%	X	.40	=	35%

1/ Based on nationwide average primary resource conversion, taking into account extraction, processing, transporation, conversion, and transmission. Electric generation conversion efficiency includes thermal, nuclear, and hydro.

2/ Point of use efficiency percentages derived from American Gas Association Report, November 10, 1978, except: (a) air to air heat pump efficiency from Popular Science, September 1976, study by Gordian Associates; (b) new generation gas furnace efficiency based on Frigiking Tappan Corporation, published test efficiency; and (c) pulse combustion gas furnace efficiency based on Hydrotherm incorporated model.

Suggested Language for
Appropriations Committee
FY85 Report
BPA ENERGY CONSERVATION PROGRAMS

Add as Fourth Paragraph on Page BP 22.

Congress recognizes the concern raised by the region's natural gas companies that BPA funded conservation programs could encourage consumers to choose electricity over competing forms of energy. BPA conservation programs should not disturb the competitive choices consumers must make between alternate energy forms. Congress is concerned that BPA conservation programs not be implemented in a manner that is likely to cause an increase rather than a decrease in the use of electricity in the Pacific Northwest. Providing consumers with incentives to use electricity for specified end-uses rather than competing energy forms is contrary to the conservation and efficient use of electric power.

Add as the last paragraph in section entitled "Home Energy Efficiency Improvement," Page BP-23.

With respect to Home Energy Efficiency Improvement in general, and the Solar and Heat Pump Water Heating program in particular, BPA shall not expend any funds to provide financial incentives that would alter free market competition between electric and natural gas-fired appliances. Furthermore, with respect to the Appliance Efficiency program, BPA shall not expend any funds on appliance efficiency that would cause consumers to switch from the present use of natural gas fired appliances to electric appliances.

Add as the last paragraph in the section entitled "New Home Construction," Page BP 23.

With respect to the New Home Construction program, BPA shall not expend any budgeted funds or any funds from off-budget financing to provide financial incentive payments which would cause the selection of electricity for space heating in the new home construction market over other energy forms.

Add as the last paragraph of the section entitled "New Commercial Buildings," Page BP 25.

With respect to the New Commercial Buildings program, BPA shall not expend any funds to provide financial or cost-sharing incentives which would cause the selection of electricity for space heating over other energy forms.

Add as the last paragraph of the section entitled "Commercial Financial Incentives," Page BP 24.

With respect to Commercial Financial Incentives, BPA shall not expend any funds for financial incentives which would result in switching from natural gas space heating use to electricity in existing commercial buildings.

Add as the last paragraph of the section entitled "Industrial Energy Audit," Page BP 25.

With respect to the Industrial Energy Audit program, BPA shall not expend any monies to provide incentives for existing industrial users to switch from fossil fuels to electricity, to choose electricity over fossil fuels in new installations, or to induce the continued use of electricity over switching to fossil fuels in existing installations.

Add as last paragraph of the section entitled "Sponsor-Designed Conservation," Page BP 25.

BPA shall not expend any money on Sponsor-designed Conservation programs that provide incentives for existing industrial users to switch from fossil fuels to electricity, to choose electricity over fossil fuels in new installations, or to induce the continued use of electricity over switching to fossil fuels in existing installations.

LACK OF EMPHASIS ON CONSERVATION

Mr. MILLER. The natural gas industry of the Pacific Northwest supports the conservation ethic of the Pacific Northwest Power Planning and Conservation Act. In fact, we believe that the consumers of the Pacific Northwest should receive the benefits intended by Congress.

Conservation under the act means any reduction in electric power consumption as a result of increases in the efficiency of energy use.

We are concerned that under the guise of conservation, BPA is designing and marketing programs which will increase rather than reduce the consumption of electricity. We are also concerned that BPA is doing so by ignoring the cost-effective criteria established by the act and unduly influencing consumers away from the opportunity to make informed, cost-effective energy choices in a free market environment. All we are asking for is a level playing field.

The natural gas industry in the Pacific Northwest has closely examined BPA's fiscal year 1985 budget for conservation programs. Three principles are incorporated in our review:

1. BPA programs should not increase electric consumption under the guise of conservation.
2. BPA should only fund conservation programs that are cost effective given the current and projected electric power surplus in the region.

3. BPA conservation programs should be fuel blind; that is, the programs should not disturb the competitive choice consumers must make between alternate fuels.

Based on these criteria, we feel that several specific programs should be deleted from BPA's budget for fiscal year 1985. Our specific budget recommendations are outlined in the attached document. The programs we urge Congress to cut are two to seven times more expensive per average megawatt saved than BPA's basic residential weatherization program. BPA previously stated that many of the programs they now seek funding for are not cost effective.

BPA ACTIONS PROMOTE FUEL SWITCHING

The natural gas industry also urges the committee to include language in the committee report specifying that BPA conservation programs will not result in increased electric consumption and will not disturb the competitive choices consumers must make between alternate energy forms. Suggested language is attached to my written remarks.

It is appropriate for BPA to fund conservation programs that decrease the use of electricity in the Pacific Northwest. I concur with the objective Administrator Johnson articulated in his March 12 remarks to the House subcommittee: BPA should pursue cost-effective conservation measures that will reduce the loads of BPA's customers. However, Mr. Johnson departs from that objective when he states:

> Energy conservation is a good example of how we have been actively applying the best-value principle.

He then defines in his testimony the best value as follows:

> The best value concept challenges managers to conduct their affairs as if a tough competitor were seeking to capture a greater share of the business.

Applying the best value principle, given the present electric power surplus, BPA appears to be seeking to increase the electric industry's market share by eroding competitor's markets. Therefore, the natural gas industry fears that many conservation programs BPA is currently funding will actually increase electric use by providing consumers with incentives to use electricity when it would be cheaper and more efficient to use natural gas or other energy sources.

The language we request the committee to include in its report will insure that funds appropriated to reduce electric loads are not spent in a manner that increase electric loads by providing consumers with incentives to use electricity rather than natural gas for specified end uses. For many end uses, especially space and water heating, natural gas is more efficient and cost effective than electricity.

Included in here is table 3 which illustrates the overall efficiencies of selected electric and natural gas appliances. It is important to note that natural gas is generally more efficient for the end uses shown than electricity because of the inherent inefficiencies involved in the conversion of primary fuels to electric energy. The average efficiency, nationwide, of converting primary energy resources to electricity is only 33 percent.

This means that 67 percent of the available energy in the primary resource is lost before it reaches the end user. The comparable figure for natural gas resource conversion, nationwide, is 88 percent. Thus, only 12 percent is lost in bringing the resource to the end user.

We concur with the observation of the Northwest Power Planning Council that BPA's budget process is mysterious and insulated from meaningful public involvement. There is no assurance that the money Congress appropriates will be spent on the actual line items specified in the budget.

Administrator Johnson stated before the House subcommittee:

> If our analysis suggests a need for additional funding in the areas of commercial, industrial, and agricultural conservation, we have agreed to consider a shift of funds from other conservation areas.

BPA apparently reserves the right during the fiscal year to shift dollars to other programs without public hearings or congressional approval. Given this practice, it is especially important for the committee to include language in its report establishing that specific conservation funds cannot be spent in a manner that increases electric loads by giving consumers incentives to choose electricity over natural gas and other fuels.

Mr. Chairman, that concludes my remarks.

Chairman HATFIELD. Thank you, Mr. Miller.

COMPARATIVE IMPACT OF CONSERVATION

Mr. Miller, what is your reaction to the power planning council's increase capability in the commercial-industrial conservation programs?

Mr. MILLER. I guess it is generally our feeling, and based on some figures we had obtained through a Bonneville study, it was not nearly as cost effective as insulation of the existing home and that our concern is that even though these may in fact be pilot programs, that we have no assurance that these moneys will not, in fact, generate additional use of that electricity or switch us from the use of other fuels to use of electricity.

Chairman HATFIELD. Are you saying in a practical manner that we cannot fund these programs in the commercial and industrial sectors and implement them in a manner which will be "fuel blind," I think is the phrase.

Mr. MILLER. If I interpret your term "fuel blind" to mean that there would be equal treatment for all energy sources, I believe that is true, that it is not currently on a fuel blind basis, that it is only being provided for incentives in the electric utilization sector.

Chairman HATFIELD. I wouldn't want to quibble on the question of total equality. But is there a possibility of getting equity between the various types of energy?

Mr. MILLER. I would think so. I think, given the fact that generally we can sell natural gas at a lower price than electricity, if that was used as some element for figuring out a relative basis for funding, then it could be accomplished.

Chairman HATFIELD. I have a letter here sent to me by Lynn Frank, director of the department of energy from Salem, the State energy department.

Mr. MILLER. I am very familiar with Lynn Frank.

Chairman HATFIELD. It is dated March 27. I don't know if you have seen a copy of this.

Mr. MILLER. No, I have not.

Chairman HATFIELD. He indicates the gas companies have raised a question about whether these programs would unduly emphasize switching from gas to electric fuels. Then this sentence:

> These programs can be structured and implemented in a way that will not unfairly disadvantage the gas companies.

Now, would you disagree with that conclusion or you believe it is correct?

Mr. MILLER. Not knowing what his proposed program is, it would be hard to speculate on that. But I would say that if a program could be structured so that it would not affect the switching from alternate fuels, either gas or oil, to electricity, then certainly we would go along with that idea.

Chairman HATFIELD. But the real bottom line question is, Do you think it is possible to structure a program like that?

Mr. MILLER. Yes, I do.

Chairman HATFIELD. Do you support the BPA budget request for residential weatherization?

Mr. MILLER. We have no quarrel with that at all. In fact, they had substantially reduced the amount budgeted for residential compared to their original 1985 budget request. We felt that based on their own figures, it was much more cost effective than using the money for some of these other programs.

Chairman HATFIELD. Have you had satisfactory access to BPA in terms of discussing these matters?

Mr. MILLER. Yes, we have. There has been some limitation because of some legal action that we have pending with regard to the plan of the power planning council. But generally, yes, we have been able to discuss these matters. We are trying to gear up now to make a closer tie between our industry and Bonneville and all of these councils.

Chairman HATFIELD. If you run into any problems, let one of the former staff people know and I will talk to one of my former staff people and get them together. [Laughter.]

Mr. MILLER. There are enough of them around, Senator. That is for sure. We have some on our staff, too.

Chairman HATFIELD. We would be very happy to keep it in the family to facilitate this.

Mr. MILLER. Right.

Chairman HATFIELD. Thank you very much.

Mr. MILLER. Thank you very much. I appreciate the time.

BONNEVILLE POWER ADMINISTRATION PROGRAMS

STATEMENT OF KEITH COLBO, CHAIRMAN, NORTHWEST POWER PLANNING COUNCIL

ACCOMPANIED BY ROY HEMMINGWAY, VICE CHAIRMAN

Chairman HATFIELD. Mr. Keith Colbo, chairman of the Northwest Power Planning Council, and Roy Hemmingway is accompanying you.

Mr. COLBO. Thank you, Chairman Hatfield.

For the record, my name is Keith Colbo. I am chairman of the Northwest Power Planning Council. With me today is Mr. Roy Hemmingway, council member from Oregon and vice chairman of the council.

It is a pleasure to appear before the subcommittee today to discuss the council's views on Bonneville's proposed fiscal year 1985 budget.

The council was created by Congress and the Northwest States to guide the resource acquisitions of Bonneville. The council is appointed by the Governors of Idaho, Oregon, Montana, and Washington.

We have submitted a written statement for the record. I will summarize that briefly for you in making the following points concerning the Bonneville Power Administration's fiscal year 1985 budget.

First, Bonneville Power Administration's official budget document and testimony before this subcommittee do not commit the agency to be consistent with the Northwest conservation and electric power plan adopted by the council pursuant to the Northwest Power Act. In fact, in important particulars, the official budget numbers are inconsistent with the plan.

Second, the process used by Bonneville to develop and implement its budget is also troublesome. It is long on flexibility and very short on accountability. Under the procedure currently used to develop BPA budgets, there are too few opportunities for the council or the public to be involved in major BPA budget planning and expenditure decisions.

The budget document presented by BPA to Congress has been characterized by the agency itself as only a moving target. These critical defects in the process make it difficult, if not impossible, for the council and the public to monitor compliance with the regional power plan.

BPA CONSERVATION ACTIVITIES

Third, the council is consulting with BPA on its fiscal year 1985 spending plans and fiscal years 1986–87 program development plans. Our consultations have been productive. Recently, we received additional material from BPA indicating a greater effort to diversify the conservation budget. However, we still have concerns about the level of spending for industrial and agricultural conservation.

We are all aware that the Pacific Northwest currently has an energy surplus. That is why we do not advocate BPA programs solely designed to purchase megawatts. Instead, we need to develop the ability to obtain power from the lowest cost resources when additional power is needed.

The regional power plan concluded that conservation is the lowest cost resource for the Northwest. The plan also concluded that we must make modest investments now to build the capability to deliver conservation programs when they are needed.

BPA's efforts to build capability must focus where the resource potential is. And that is precisely what the official BPA budget did not do. It proposed to spend where we already have capability and did not commit sufficient funding in areas of high potential where we do not have proven programs.

Let's look briefly at the numbers. The chart here compares the council's 2-year action plan targets with BPA's spending in its official fiscal year 1985 budget. The council projects that 25 percent of conservation should occur in the commercial sector. BPA proposed, in its official budget, to spend only 10 percent of its fiscal year 1985 conservation budget in that sector. The council believes that 10 percent of conservation should occur in the agricultural sector. BPA's budget showed only 1.5 percent in that sector. The council believes that 10 percent of conservation should occur in the industrial sector. BPA proposed to spend only 3.6 percent of its budget in that sector.

The recent BPA communication with the council indicates that the agency now intends to spend significantly more for commercial conservation. Spending for industrial and agricultural conservation, while improved, remains too low.

The discrepancy between the official BPA projections and the council plan is considerably worse in the outyears. The fiscal years 1986–89 figures contained in this budget are inconsistent with the plan. We have been told by PBA that the future projections are not meaningful, that they only represent the cost of completing existing programs, and that BPA is in the process of developing its future budgets.

BPA has recently agreed to provide the council with its draft program plans for fiscal years 1986 and 1987. The council will have an opportunity to review and comment on those figures prior to Bonneville's next budget submission and the upcoming rate case. In addition, BPA has agreed to consult with the council in advance of major changes in the budget.

We look forward to participation in these reviews. We must emphasize, however, that long-term BPA projections must be meaningful. They must be firm, useful targets so Congress and the council can monitor BPA's implementation of the regional plan.

We continue to believe it is essential to diversify the conservation budget. The regional plan calls for diversification. For example, the region already knows how to deliver conservation in the residential sector. However, we still have much to learn about saving energy in the commercial, industrial, and agricultural sectors.

In sum, we believe BPA spending must approximate the conservation potential of each sector of the economy. BPA staff has assured us that they are moving in that direction. To emphasize the importance of these changes, we are seeking a congressional directive that BPA must allocate its spending to be consistent with the regional energy plan by spending to build conservation capability in approximately the proportions set out in the council's regional plan.

The attainment of the council's conservation goals may require a modest increase in the overall BPA budget. The key point is to ensure that BPA can and will diversify its current budget so that the region will be able to meet its future energy need at the lowest possible cost. This can be accomplished only if the BPA budget process is made open to Congress, the council, and the residents of the Pacific Northwest. Equally important, there must be a way to ensure that BPA's budget is accountable and that the regional plan is being implemented.

We appreciate, Mr. Hatfield, the opportunity to present this testimony to you today. We would welcome any questions.

[The statement follows:]

STATEMENT OF THE NORTHWEST POWER PLANNING COUNCIL

Chairman Hatfield, my name is Keith Colbo. I am Chairman of the Northwest Power Planning Council. With me today is Mr. Roy Hemmingway, Vice Chairman of the Council. It's a pleasure to appear before the Subcommittee today to discuss the Council's views on Bonneville's proposed Fiscal Year 1985 budget.

The Council was created by the Northwest Electric Power Planning and Conservation Act of 1980 and the Northwest states to guide the resource acquisitions of BPA. The Council membership is appointed by the Governors of Idaho, Oregon, Montana and Washington.

The activities of the Bonneville Power Administration are extremely important to the Pacific Northwest. Bonneville plans to spend approximately $3 billion in Fiscal Year 1985.

The Northwest Power Planning Council has reviewed Bonneville's budget. The Council would make the following points concerning the budget:

1. Bonneville Power Administration's official budget document and testimony before this subcommittee do not commit the agency to be consistent with the Northwest Conservation and Electric Power Plan adopted by the Council pursuant to the Northwest Power Act. In fact, in important particulars, the official budget numbers are inconsistent with the plan.

2. The process used by Bonneville to develop and implement its budget is also troublesome. It is long on flexibility and short on accountability. Under the procedure currently used to develop BPA budgets, there are too few opportunities for the Council or the public to be involved in major BPA budget planning and expenditure decisions. The budget document presented by BPA to Congress has been characterized by the agency itself as only a moving target. These critical defects in the process make it difficult, if not impossible, for the Council and the public to monitor compliance with the regional power plan.

3. The Council is consulting with BPA on its FY 85 spending plans and FY 86-87 program development plans. Our consultations have been productive. Recently, we received additional material from BPA indicating a greater effort to diversify the conservation budget. However, we still have concerns about the level of spending for industrial and agricultural conservation.

We will first examine the BPA budget process and its relation to the Council. The Council adopted its Columbia River Basin Fish and Wildlife Program on November 15, 1982 and its Northwest Conservation and Electric Power Plan on April 27, 1983. Both documents were completed before BPA submitted its FY 85 budget.

Preliminary BPA budget planning took place in early 1983, resulting in an internal budget in June 1983. The budget was submitted to the Department of Energy and the Office of Management and Budget in August of 1983, and the President submitted the Bonneville budget as part of the Administration's budget to Congress in late January 1984.

Until the President's submission of the budget to Congress, Bonneville's budget is considered confidential. The Council and the public do not have access to the specific dollar figures in the budget, and BPA did not consult with the Council about the specific FY 85 funding levels.

In addition, for a Federal agency, Bonneville has unique flexibility in how it spends the money in its budget. BPA can reprogram funds within categories; Bonneville can also reprogram funds between categories after the budget has been reviewed by the Congressional committees.

A specific example of this budget flexibility illustrates the scope of BPA's discretion. In BPA's FY 85 budget, there is a brief reference to studies on additional intertie transmission between the Pacific Northwest and Pacific Southwest. At a recent Council meeting two weeks ago, Bonneville informed us that, depending on the outcome of these studies, Bonneville might later propose a change in its FY 85 budget to provide for construction of additional intertie capacity. This expansion represents a $100 million expenditure. Such an expansion could affect regional power planning, construction of regional generating resources and the sale of surplus power within the Northwest. So far as we are aware, the people of our region were not notified of BPA's decision and were not afforded an opportunity to comment on it.

This budget flexibility means that the BPA budget document, unlike other Federal agencies' budgets, is not a programmatic decision-making document. In fact, BPA appears to have no such document. BPA representatives that have told the Council the BPA budget is "a moving target." This makes it virtually impossible to use the budget to monitor the progress BPA intends to make toward implementation of the plan.

Given the volatile nature of the Northwest energy situation, it is important for the Bonneville Power Administration to have the flexibility to reprogram funds to deal with changing circumstances. However, the current process does not provide any opportunity for the Council or the public to review and influence these changes. The exercise of this budget flexibility must be visible, open and accountable to the ratepayers of the Pacific Northwest. There needs to be a better process to open to public scrutiny both Bonneville's budget and budget implementation. The Council has circulated a staff issue paper seeking public comment on ways to provide more public accountability. And the Council is consulting with BPA on specific ways to make the budget process more accountable.

We can now turn to the substance of the Bonneville budget as it relates to the Council's regional power plan and fish and wildlife program. When the Council adopted the regional power plan in April of 1983, it recognized the substantial surplus facing the Pacific Northwest. The primary focus of the Plan over the next two years is to develop and test conservation programs in all sectors of the economy so that these programs will be reliable and available when the region needs additional power. Because of the surplus, the plan does not include the acquisition of any conservation or other resource solely for the purpose of acquiring power during the next two years.

The goal of capability building is to insure conservation resource which is "available and reliable." That means that Bonneville must have a demonstrated ability to secure a specified quantity of savings at a specified cost within a specified time.

Building capability involves: 1) information about how much conservation is available based on "real world" cost and performance information, including construction schedules and lead times, labor force requirements and market characteristics; 2) the development of infrastructures to deliver conservation, including a trained and experienced labor force and materials suppliers; 3) administrative systems and experience; 4) agreement on standard contracts to deliver the conservation; 5) resolution of financial considerations including the incentive levels that will be paid for conservation and an analysis of how much conservation is cost-effective; and 6) compliance with the National Environmental Policy Act.

The Council has concluded that BPA already has the capability to deliver weatherization programs in existing residential structures. The major thrust of the Plan was to build capability in the commercial, industrial, and agricultural sectors. There is an important reason for this shift in emphasis: Looking at the long-term resource potential, weatherizing existing homes provides only about 25% of the future power available from conservation in the region. Therefore, the other sectors of the economy are very important if the region is going to be in a position to meet future load growth with the lowest cost resources.

The Plan lays out a number of steps that Bonneville needs to take to build capability in the commercial, industrial, and agricultural sectors. The megawatt targets set in the plan provide a way to measure BPA's progress in diversifying its efforts into these new sectors. The megawatt targets also represent the levels of effort that will demonstrate the capability for BPA to meet the needs of a strong and growing regional economy.

This past fall, the Council conducted a thorough, detailed review of Bonneville's first six months of effort at implementing the regional plan. Based on our review, the Council, in a letter dated December 15, 1983, generally commended Bonneville on its efforts to accomplish the requirements of the action plan. We stated that with the exception of a few, but critical, action items Bonneville appeared to be on the path to successfully implementing the plan and that the BPA staff had made a good faith effort to meet the plan's requirements. Our greatest concern was that Bonneville's commitment of resources did not appear to be consistent with the regional plan's goal for Bonneville to diversify its efforts by achieving cability outside the existing residential sector. It appeared that additional budget was needed in appliances and in the commercial, industrial and agricultural sectors.

Bonneville's proposed FY 85 and FY 86-89 budget projections did not resolve the concern expressed by the Council in our December 15, 1983, letter. Stated simply, Bonneville's proposed budgets were not consistent with the plan's diversification goals.

In the December 15, 1983, letter the Council also observed that many of BPA's plan implementation problems for Fiscal Year 1984 resulted from the schedule of Bonneville's budgeting and ratemaking processes. BPA's FY 84 budget and rates, for example, were determined prior to the Council's final plan and without reference to the draft plan. To prevent future implementation problems, the Council recommended that Bonneville use the five year conservation targets in the plan to establish Fiscal Year 1986 and 1987 budgets and rates. The letter pointed out that the plan's rate of implementation in all sectors during the next five years was set to meet reasonably high economic growth. The Council also stated that the megawatt targets represented a measure of capability and diversity, and that the FY 85 megawatt targets represented the lowest reasonable progress necessary to meet the regional plan's 1988 targets.

In a recent communication to the Council, BPA has indicated an intention to diversify further its conservation spending plans for FY 85. Although we need to analyze this recent submission more closely, it appears that BPA has made significant changes in commercial sector spending. We remain concerned about the inadequate level of investment in industrial and agricultural conservation. We will continue our consultations with BPA and report progress to the subcommittee.

For now, we ask the subcommittee to incorporate the following language in the report on the FY 85 BPA Budget:

"The subcommittee reaffirms the mandate of the Pacific Northwest Electric Power Planning and Conservation Act of 1980 (P.L. 96-501) and directs that Bonneville Power Administration's FY 85 spending programs be consistent with the Northwest Conservation and Electric Power Plan developed by the Northwest Power Planning Council pursuant to that Act. FY 85 funds spent in developing outyear program development plans shall likewise be expended to develop program plans that are consistent with the regional plan. BPA shall insure that its conservation spending proportions approximate the energy conservation proportions indicated in the Council plan."

The point of the language is to diminish BPA flexibility on these vital areas of the agency's budget and increase accountability to the regional plan and the region's ratepayers.

The Council also has reviewed BPA's budget for fish and wildlife activities. The Bonneville budget proposal includes a $27,100,000 item for the fish and wildlife program. It is the Council's understanding that Bonneville plans to add at least another $5-6 million to that amount to reflect its intent to increase borrowing to provide additional funds for construction of fish passage facilities in the Yakima River Basin. The Council is pleased that Bonneville has increased its spending beyond the $22 million planned in its rate decision. The Council also is pleased with Bonneville's statement that it intends to use its funding authority consistently with the Council's Columbia River Basin Fish and Wildlife Program and with its indication that there is sufficient flexibility in the Bonneville budget to adjust its spending to accommodate program direction provided by the Council.

However, we oppose the proposal to transfer responsibility for funding operation and maintenance of the "Mitchell Act" hatcheries (including rearing ponds) to Bonneville. That proposal is reflected in the proposed BPA budget.

The Council supports the continuation of Congressional appropriations for operation and maintenance of the Mitchell Act hatcheries. In doing so, we are not endorsing the present management policies and practices undertaken at those hatcheries.

We believe the proposed transfer is inconsistent with Congressional intent in the Northwest Power Act.

Section 4(h)(10)(A) of the Act states that the Bonneville Administrator's expenditures on fish and wildlife must be "in addition to, not in lieu of, other expenditures authorized or required from other entities under other agreements in provisions of law." The House Interior Committee explained that this meant that "[o]ther fisheries efforts outside the Act, for example, are expected to continue and to be funded separately."

The hatcheries in question were built to deal with a variety of adverse impacts on fish including irrigation, forest practices, pollution and flood control -- not hydropower alone. Bonneville may address non-hydropower impacts only as offsite enhancement for the effects of the hydropower system and in a manner consistent with the Council's program.

Second, the proposed transfer is inconsistent with the Council's Columbia River Basin Fish and Wildlife Program. It may, in fact, undermine the Council's program by ultimately reducing the amount of funds available for program measures.

In summary, we believe the proposal to transfer funding of the Mitchell Act hatcheries to Bonneville is inconsistent with the Northwest Power Act, inconsistent with the Council's Columbia River Basin Fish and Wildlife Program, likely to reduce the amount of funding available for the Council program measures, and contrary to the goal of stemming the decline of the valuable national resource the Council and the Congress have been working to protect.

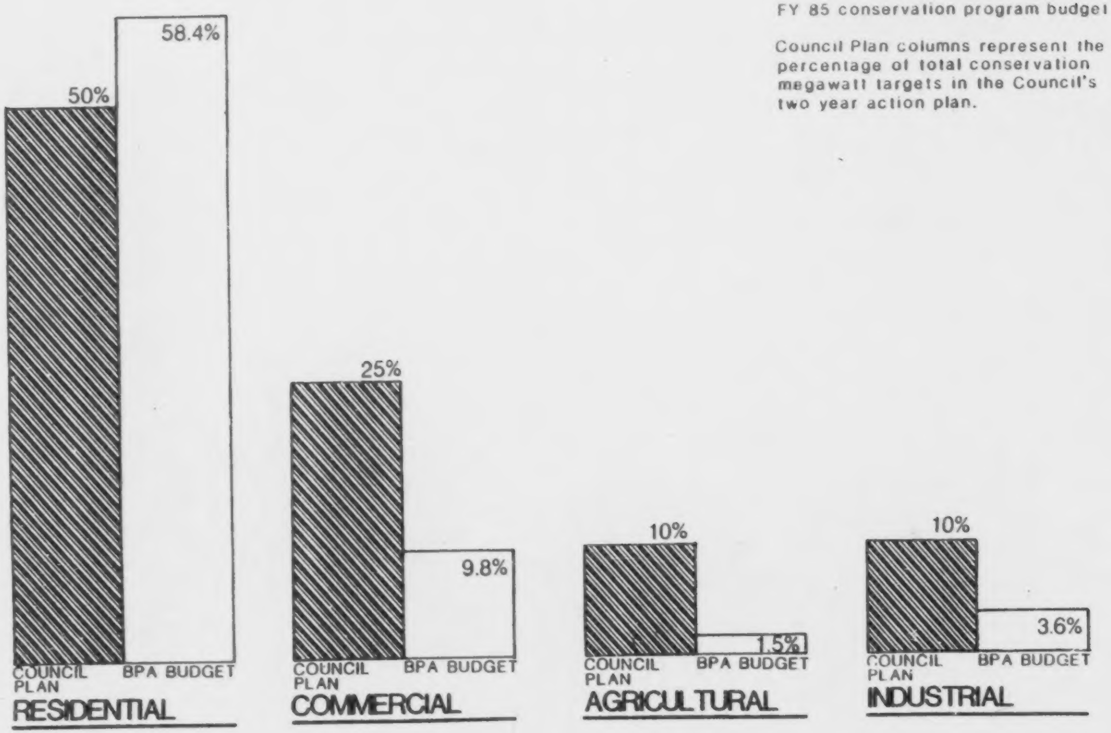
Thank you for the opportunity to testify.

FY 85

% of Activity by Sector*

* BPA Budget columns represent the percentage of BPA's total FY 85 conservation program budget

Council Plan columns represent the percentage of total conservation megawatt targets in the Council's two year action plan.



PROPOSAL TO REDUCE CONSERVATION ACTIVITIES

Chairman HATFIELD. Mr. Hemmingway, do you have any remarks you wish to make?

Mr. HEMMINGWAY. No. I am here to answer questions.

Chairman HATFIELD. Mr. Colbo, would you care to comment on the natural gas industry's proposal to reduce conservation programs, particularly in the industrial, commercial, and agricultural sectors?

Mr. COLBO. Mr. Chairman, I would offer several observations, and I am sure Mr. Hemmingway would like to comment as well.

First of all, by setting the environment that we find ourselves in as a council, having been sued and that action pending now, and as a participant in that action, as a defendant, trying to resolve the issues that have been brought before this committee now, that would strike at I think the heart of the diversification of BPA's conservation effort. The numbers presented that we have had an opportunity to review do not surprise us, nor do they discourage us. The analysis that has been done deals with pilot projects that are intended to demonstrate the ability of the region to respond in these sectors of the economy to future conservation needs and to firm up, in other words, that resource for the region.

The initial cost of any pilot program is high. When I say "not discouraging," I mean they are still cost effective within the term as used by the council. So the testimony does concern me.

The heart of the conservation program is the diversity. I think the programs being referred to by the previous testimony are terribly important to Bonneville and to the region and to the council's plan.

Mr. Hemmingway may add to that.

Mr. HEMMINGWAY. I think the gas company's position shows a fundamental misunderstanding of the plan. The plan is intended to provide the region with a basis of energy sufficiency no matter what load demand occurs in the future. Given that there is substantial uncertainty about that load demand and the resources that will be available to serve us, notably 1,600 megawatts of WPPSS 1 and WPPSS 3 which remain in doubt, the council has suggested in its plan that Bonneville direct its effort toward diversification of conservation programs out of the residential sector into other sectors, so that if that energy is needed, we can count on that energy being delivered from those conservation programs in those other sectors. They will be needed and needed quite rapidly in the event that load grows rapidly, in the event that WPPSS 1 and 3 cannot be completed.

These programs that are projected are cost effective. The pilot programs that are suggested in the budget are needed to get the programs going. And in my opinion there is no increase in the use of electricity caused by these programs.

Now in the case of the residential standards demonstration program, which they have suggested be deleted from the budget, Bonneville is asking for sufficient funds to be able to fund conservation homes which would be built with electric heat. The number of homes suggested to be built in Oregon, for instance—and I am sure the case is true in Washington—represents something like 2 to 3 percent of the housing starts even in a depressed market.

So I cannot see that Bonneville is having a substantial impact in the fuel choice through this program. It is also only a demonstration program.

Chairman HATFIELD. Thank you very much, gentlemen. I appreciate your testimony here today.

PACIFIC NORTHWEST WATER RESOURCE PROJECTS

STATEMENT OF STEVE LINDSTROM, EXECUTIVE VICE PRESIDENT, PACIFIC NORTHWEST WATERWAYS ASSOCIATION

Chairman HATFIELD. Steve Lindstrom, Pacific Northwest Waterways Association.

Mr. LINDSTROM. Good day, Mr. Chairman. I am delighted to have this opportunity to appear before you. I am further pleased and proud to be able to introduce in the audience a number of the waterways association members who have taken time out from their personal schedules to appear here in support of our testimony.

INTRODUCTION OF SUPPORTING WITNESSES

Chairman HATFIELD. We are happy to welcome each person here. Would you like to introduce them?

Mr. LINDSTROM. Thank you. I would like to. Then I will point them out to you.

Port Commissioner from Kalama, Wash., Milford Westin; John Fratt from Kalama; John Belford from Everett, Wash.; Jeff Kasper from Bellingham, Wash.; Bob MacNannay, Longview, Wash.; Ben Murphy, Vancouver, Wash.; Andy Nesbitt, Port Angeles, Wash.; and Jerry Hendricks, Port Angeles, Wash. Also running around somewhere on this Hill, being swept to and from by the tides, are a couple of other friends from the Port of Portland, as well as friends from the Port of Everett.

Chairman HATFIELD. We are happy to welcome each one of you here and thank you very much for your presence.

Mr. LINDSTROM. For the record, I am Steve Lindstrom, executive vice president of the waterways association, which for 50 years has supported the comprehensive planning and development of the water and related land resources in the Pacific Northwest region and Alaska.

Our first point is to strongly support the budget of the North Pacific Division of the Corps of Engineers in the amount of $243 million, some $21 million less than the amount appropriated for fiscal year 1984. We are thankful to this committee for its past support of the Corps activities in our region and applaud your foresight in providing so well for us throughout the years.

I might digress for a moment to note, Mr. Chairman, you are in much better health this year during public testimony week than you were last year. I am delighted to find that means you are not allergic to tin cups. The congestion last year was unfortunate.

Regarding the North Pacific Division of the Corps, there are some unfunded capabilities that we would like to bring to your attention. We mention in the appendix to our summary here the details. They amount to some $900,000 for three new studies, $3.4 million for increases for continuation of planning and engineering, and nearly $32 million for three construction efforts, with particular emphasis being placed on the completion of design and start of construction of the new lock at Bonneville Dam.

The other project areas are in the Columbia River and tributaries study; the rivers and harbors in Alaska study; the Coos Bay deep-draft navigation channel study; McNary Dam Second Powerhouse; Cowlitz River and tributaries study; Elk Creek Lake; and John Day lock and dam juvenile fish passage systems.

MOUNT ST. HELENS WORK

We want to particularly detail the needs in the continuing aftermath of the eruption of Mount St. Helens. Your support thus far has been gratifying, and we thank you for it. The future needs are well described by now, and we urge that Congress adopt the necessary program without delay to implement the long-range solutions.

Construction will start this summer on a permanent outlet to Spirit Lake. But congressional authority and appropriations are needed to complete the installation of structures to do the long-term job, especially in the construction of the single retention structure to trap sediments and keep them from descending the Toutle/Cowlitz River system and further threatening the residents, businesses, and transportation activities in the areas below the volcano.

Please don't be misled by the contention of a selfish few of the system who contend the system is stabilizing itself and will not be subject to substantial erosion in future years. We feel that is misleading.

We are expressly convinced that enough studies have been done to guarantee the single retention structure is the correct solution and can be appropriately designed, constructed, and operated with full measures of safety and cost effectiveness. The sooner we get on with its construction, the sooner we can suspend the costly and ever-continuing dredging downsystem—dredging, we miqht add, that is increasingly expensive and complicated because of decreasing areas appropriate for spoil disposal.

We feel it would also be appropriate for the Corps to be given authority to proceed with real estate acquisition necessary to the construction of the single retention structure as final design and environmental impact statements are being completed. This modest effort at fast-tracking, without breaching a very delicate process, could save nearly a year in getting this vital component of the solution into place.

RECLAMATION PROGRAMS

The second point is to strongly support the budget of the Pacific Northwest region of the Bureau of Reclamation at the level of $149 million. The Bureau is rightly busy in our region and deserves your continued strong support.

BPA PROGRAMS

Our third point is to request that you take a close, hard look at the budget of the Bonneville Power Administration before you approve it. We are generally supportive of the BPA budget. However, BPA is caught in the midst of a regionwide discussion about how much is being spent on fish and wildlife improvements, when the improvements are being done, and who is paying for them? If it weren't such a serious scramble, it would be ludicrous.

We urge this committee require that the involved parties demonstrate to it the unequivocable efforts and expenses to be committed to fish and wildlife improvements, the timeframes within which they will be accomplished, the expected or intended results, and who will pay how much for those efforts.

Future budget discussions should include review of the success of the BPA promises and a detailing of the expenses.

Further, we feel BPA must maintain a regular repayment schedule to the Federal Treasury of borrowed money and interest. Deferring payments due, whether in terms of fish to be replaced or dollars to be returned, is a deceptive and hurtful practice, one not to be tolerated.

WATER RESOURCE POLICY ISSUES

Having watched closely the progress of the so-called new starts bill and other legislation during the first half of this Congress, we continue to be gravely concerned about the long hiatus in water resource project approval. We hope that the entangling questions of cost sharing, user taxes, non-Federal participation, et cetera, can be resolved to the satisfaction of the Congress, the administration, and the water resources community before the dearth of new projects undermines major segments of our Nation's economy and quality of life.

I would add, as an aside, that the waterways association supports the testimony of the Rogue Basin group, the Oregon coastal ports group, and the yet-to-follow Columbia Basin Development League.

In closing, we compliment you for your tireless efforts to husband well our water resources. We urge your support of the budgets for the Corps and Bureau. We implore that you look at a couple of critical efforts for which capabilities exist in the Pacific Northwest Division and, perhaps, on a more modest basis, the opportunity for some additional anchorages in the lower Columbia River system. We pledge our full cooperation in solving the policy problems.

Thank you very much for your kind attention.

BONNEVILLE NAVIGATION LOCK, OREGON

Chairman HATFIELD. Thank you, Mr. Lindstrom.

Would you care to comment further as to what you consider to be the importance of the replacement of the Bonneville locks?

Mr. LINDSTROM. Absolutely, sir. In our opinion, that is one of the three most critical inland waterway improvements necessary in this whole Nation. It is the weak link in a chain for improving exports, for improving energy efficiency, and for contributing substantially to the rebuilding of the economy in the Pacific Northwest region. Because of the safety and navigation hazards at Bonneville and its lesser capacity than the others up the system, we find that only about one-third of the potential total tonnage on the Columbia-Snake system can be moved until that lock is replaced.

Chairman HATFIELD. Your estimate of that, one of the top three requirements of priority in the Nation, has been confirmed by a number of independent studies, engineering studies, as well; is that not true?

Mr. LINDSTROM. That is indeed correct, sir. In addition, a number of the national groups have recognized that.

Chairman HATFIELD. If the Government were to build on one, which one would you think would be most appropriate?

Mr. LINDSTROM. Bonneville, sir. [Laughter.]

Chairman HATFIELD. Thank you.

Mr. LINDSTROM. Thank you, sir.

[The statement follows:]

STATEMENT OF STEPHEN R. LINDSTROM, EXECUTIVE VICE PRESIDENT, PACIFIC NORTHWEST WATERWAYS ASSOCIATION

Good Day, Mr. Chairman and Members of the Subcommittee:

I am Stephen R. Lindstrom, Executive Vice-President of the Pacific Northwest Waterways Association (PNWA). As you may know, PNWA has for fifty years supported the comprehensive planning and development of the water and related land resources in the Pacific Northwest region and Alaska. Our broad-based citizens' group encompasses a wide variety of interests throughout the energy and water spectrum.

Joining me today at this hearing are a number of interested and supportive PNWA members from throughout the Northwest. We very much appreciate the opportunity and privilege to appear before you today and express our views. Our testimony consists of this short summary and a slightly longer appendix with additional details.

Our first point is to strongly support the budget of the North Pacific Division of the Corps of Engineers. The request for $243,020,000 is some $21,000,000 less than the amount appropriated for FY 1984. We are thankful to this Committee for its past support of Corps activities in our region and applaud your foresight in providing so well for us throughout the years.

However, there are several unfunded capabilities in the North Pacific Division we would like to bring to your attention. They amount to $899,000 for three General Investigations increases for study efforts; $3,400,000 for two GI increases for Continuation of Planning and Engineering; and, $31,900,000 for three Construction efforts, with particular emphasis being placed on the completion of design and the start of construction of the new lock at Bonneville Dam.

The other project areas needing increases are in the Columbia River and Tributaries Study; the Rivers and Harbors in Alaska Study; the Coos Bay Deep-Draft Navigation Channel Study; McNary Dam Second Powerhouse; Cowlitz River and Tributaries Study; Elk Creek Lake; and, John Day Lock and Dam Juvenile Fish Passage Systems. These are fully itemized and discussed in our written statement.

PNWA wants to particularly detail the needs in the continuing aftermath of the eruption of Mt. St. Helens. Your support thus far has been gratifying and we thank you for it. The future needs are very well described by now and we urge that Congress adopt the necessary program to implement the long-range solutions. Construction will start this summer on a permanent outlet to Spirit Lake. But Congressional authority and appropriations are needed to complete the installation of structures to do the long-term job, especially in the construction of the single retention structure to trap sediments and keep them from descending the Toutle/Cowlitz River System and further threatening the residents, businesses and transportation activities in the areas below the volcano. We are expressly convinced that enough studies have been done to guarantee the single retention structure is the correct solution and can be appropriately designed, constructed and operated with full measures of safety and cost-effectiveness. The sooner we get on with its construction, the sooner we can suspend the costly and ever-continuing dredging downsystem – dredging, we might add, that is increasingly expensive and complicated because of decreasing areas appropriate for spoil disposal.

We feel it would be appropriate for the Corps to be given authority to proceed with real estate acquisition necessary to the construction of the single retention structure as final design and environmental impact statements are being completed. This modest effort at fast-tracking, without breaching a very delicate process, could save nearly a year in getting this vital component of the solution into place.

Our second point is to strongly support the budget of the Pacific Northwest Region of the Bureau of Reclamation. The request for $149,000,000 is 12% morethan the amount appropriated for FY 1984. The Bureau of Reclamation is rightly busy in our region and deserve your continued strong support. Their programatic highlights for FY 85 are detailed in our written statement.

Our third point is to request that you take a close, hard look at the budget of the Bonneville Power Administration before you approve it. BPA is caught in the midst of a region-wide discussion about how much is being spent on fish and wildlife improvements, when the improvements are being done and who is paying for them. If it weren't such a serious scramble, it would be ludicrous. We urge that this Committee require that the involved parties demonstrate to it the unequivocable efforts and expenses to be committed to fish and wildlife improvements; the time frames within which they will be accomplished; the expected or intended results; and who will pay how much for those efforts. Future budget discussions should include review of the success of the BPA promises and a detailing of the expenses. Further, we feel BPA must maintain a regular repayment schedule to the Federal Treasury of borrowed money and interest. Deferring payments due, whether in terms of fish to be replaced or dollars to be returned, is a deceptive and hurtful practice, one not to be tolerated.

Having watched closely the progress of the so-called "new starts" bill and other legislation during the first half of this Congress, we continue to be gravely concerned about the long hiatus in water resource project approval. We hope that the entangling questions of cost-sharing, user taxes, non-federal participation and etc. can be resolved to the satisfaction of the Congress, the Administration and the water resources community before the dearth of new projects undermines major segments of our Nation's economy and quality of life.

In closing, we compliment you for your tireless efforts to husband well our water resources; we urge your support of the budgets for the Corps and Bureau; we implore that you look at a couple of critical efforts for which capabilities exist in the North Pacific Division (especially Bonneville Lock); and, we pledge our full cooperation in solving the policy problems that impede continued wise water use. Thank you for your kind attention.

U.S. ARMY CORPS OF ENGINEERS 22 March 1984

BUDGET COMPARISONS

The Corps FY 1985 budget request to Congress totals $243,020,000 to continue activities in the Pacific Northwest and Alaska. The following budget comparisons for programs in the Pacific Northwest and Alaska have been furnished to us by the Corps.

Appropriation Category	FY 1984 Appropriation	FY 1985 Appropriation Budget Request	Change From FY 1984 To FY 1985
GI-Studies	$ 5,293,000	$ 5,680,000	$ +387,000
GI-CP&E/AE&D	4,890,000	800,000	-4,090,000
Const, General	105,754,000	82,826,000	-22,928,000
O&M, General	148,254,000	153,714,000	+5,460,000
Totals	$264,191,000	$243,020,000	$-21,171,000

The total budget request for FY 1985 is about $21 million less than the amount appropriated for FY 1984.

IMPACT OF BUDGET PROGRAM

PNWA is pleased that the funding levels that are budgeted are adequate to maintain power-on-line schedules at ongoing power producing projects. However, PNWA is disturbed by the lower level of funding for certain other appropriation categories and the absence of funding for other specific projects.

FISCAL YEAR 1984 ADDITIONS

PNWA is appreciative of the foresight of the Congress in adding funds in FY 1984 for one study resumption, in adding five continued planning and engineering projects, and in adding two construction projects, all in the North Pacific Division.

NEW STARTS

The PNWA is greatly disappointed by the absence of any new study, advance engineering and design, and construction starts in the budget request for the Corps of Engineers program in the Pacific Northwest and Alaska for FY 1985. We also are concerned over the inclusion of only one new continued planning and engineering study. The restrictions on new study, CP&E, and AE&D starts combined with constrained funding levels of these programs will have a serious impact on the future economic growth and welfare in this region. We are also concerned with the absence of any new starts in the construction category. We feel strongly that the level of funding of this important program will have a significant impact on the immediate employment, energy, and water supply of the region. PNWA believes that new study, CP&E, AE&D, and construction starts involving hydroelectric power, navigation and flood control should rank high in the budget program for the Corps and other Federal agencies.

MT. ST. HELENS

PNWA thanks Congress for its continued support of Corps' programs which permit pursuit of the interim flood protection and the Spirit Lake Tunnel. We were pleased to learn last month that the Corps of Engineers is commencing construction of a permanent outlet to Spirit Lake this summer. This much needed project shows how responsive the Corps of Engineers can be when major flood threats are imminent.

Unfortunately, this timeliness is not being carried forward into the longer range problem associated with Mt. St. Helens. This problem relates to the massive amounts of sediment which are entering the Cowlitz and Columbia Rivers. Our concerns can be divided into the following two issues.

By the Supplemental Appropriation Act of 1983, PL 98-63, Congress authorized the Corps of Engineers to provide 100-year flood protection to developed areas along the Cowlitz and Toutle Rivers until such time as a permanent solution is provided. PL 98-63 also requires the Corps of Engineers to maintain uninterrupted navigation along the Columbia River. Although the President's budget contains funding for Columbia River dredging, no funds have been programmed to continue providing the authorized flood protection. To date, the Corps of Engineers has provided marginal flood protection with PL 84-99 funds and past Jobs Bill funding. However, these funds are becoming increasingly difficult to obtain. Thus, we urge the Congress to appropriate funds necessary to ensure the Corps of Engineers continues to provide interim flood protection as authorized.

The second issue relates to the fact that Congress does not have a feasibility report in which to authorize a permanent solution to the sediment problem. After almost 2 years of study and a major report to the President, the Department of the Army has ordered another study of be completed later this year. Since the major emergency restoration work was completed in 1981, the Corps of Engineers has spent $20-30 million each year to provide marginal flood protection along the Cowlitz River. This bandaid approach has succeeded only because of low water years in this area. We must get on with a permanent solution and stop pouring millions of tax dollars into dredging and temporary levees which must be done again and again.

In our opinion, Congress should authorize a single retention structure at the Green River site based on data supplied in the report to the President. This plan has the support of the Governors of Washington, Oregon, and Idaho and all 17 members of the Oregon/Washington Congressional delegation. This project is also the solution determined to be the choice of the local interests (local government, port districts, and interest groups), as displayed by the regional consensus developed by Cowlitz County. Further feasibility level study appears to be of marginal utility, at best.

We urge the Congress to direct the Corps of Engineers to proceed with detailed engineering and design and real estate acquisition before the fact of a single retention structure at the Green River site on the North Fork Toutle River under the Cowlitz River and Tributaries study and to add an additional $2,600,000 to the FY 85 budgeted $4,000,000 on this study which would complete the engineering and design. Further, we urge the Congress to authorize this project this year so that construction could begin in FY 85. These actions will, in the long-term, reduce the demands for large and continued escalating funds requests for providing temporary measures for flood control and navigation.

SMALL PROJECTS PROGRAM

We note that the President's budget for FY 1985 for the Small Projects Program of the Corps of Engineers has increased over preceding years. Under this program, the Corps is able to respond quickly and efficiently on projects where the Federal cost is less than $2 million for Section 107 navigation projects and less than $4 million for Section 205 small flood control projects. This program permits the Corps to meet small, but urgent navigation and flood control needs and to cooperate with local interests in needed public works without having to follow the long and costly authorization process. The low level of funding for small projects in previous years has left a backlog of work that could be accomplished in FY 1985. The President's budget request will not permit the Corps to reduce this backlog. The Pacific Northwest Waterways Association strongly urges that funds for the small projects program of the Corps be provided in an amount to meet the critical needs of the region.

WATER SITUATION IN THE PACIFIC NORTHWEST

It appears that this year is shaping up to be one slightly below average runoff but still having adequate water supply. Streamflow this winter has been plentiful, with some streams experiencing above average flow. This has resulted in relatively abundant supplies of water into reservoirs, and in fact, surplus energy is being marketed outside the region.

Looking ahead to this spring and summer, the current water supply forecasts based upon recent measurements of the basin snowpack indicate that a runoff of 90% to 95% of normal can be expected. With this supply of water, reservoir managers foresee a summer reservoir operation in which conflicts over competing usage of water will be minimized.

ADDITIONAL CAPABILITIES

At our request, the Corps has furnished a list of studies and projects for which it has reported capabilities to use additional funds above the FY 1985 budget amounts. Although project and study capabilities reflect the readiness of the work for accomplishment, they are in competition for available funds and manpower Army-wide. In this context, the FY 1985 capability amounts shown consider each project or study by itself without reference to the rest of the program. However, it is emphasized that the total amount proposed for the Army's Civil Works program in the President's budget for FY 1985 is the appropriate amount consistent with the administration's assessment of national priorities for federal investments and the objectives of avoiding large budget deficits and the serious adverse effect that government borrowing is having on the national economy. Therefore, while the Corps could utilize additional funds on individual projects and studies, offsetting reductions would be required in order to maintain their overall budgetary objectives. PNWA screened the many worthwhile studies and projects included in the programs for which the Corps is responsible and carefully studied the capabilities and PNWA's estimated first-year funding amounts for those studies and projects not having capabilities, and are recommending those which we consider paramount to fulfilling PNWA's goals for water and related land resource development of this region. Of the studies and projects in which the Corps has reported additional approved capabilities along with some other Corps projects, we are specifically recommending increases to eight studies and projects. These are summarized by category below. The

Cowlitz River and Tributaries increase was previously discussed under MT. ST. HELENS (page 2). The individual writeups for the remaining seven projects are summarized below:

Appropriation	PNWA's Recommended Increases to the FY 1985 Budget Request	Study/Project
General Investigations Studies	$ 899,000	CR&T $433,000 R&H in Alaska $226,000 Coos Bay $240,000
General Investigations Continuation of Planning & Engineering Studies	$ 3,400,000	McNary 2nd PH $800,000 Cowlitz R&T $2,600,000
Construction, General	$ 31,900,000	Bonn. Nav. Lock $7,000,000 Elk Creek Lake $18,000,000 John Day L&D $6,900,000

STATEMENTS IN SUPPORT

OF

ADDITIONAL FUNDING FOR FY 1985

GENERAL INVESTIGATIONS - CONTINUING STUDIES

Columbia River and Tributaries, ID, MT, OR, and WA

FY 1985 Budget Amount	$1,649,000
Additional Recommended for FY 1985	$433,000

The residents of the Pacific Northwest are dependent to a large extent upon the Columbia River for its power, food and fiber through irrigation, transportation through navigation, recreation, fisheries, and to a lesser extent, municipal and industrial water supply. No other single resource in the Pacific Northwest influences the character and way of life in the region as much as the Columbia River and its major tributaries. These uses have often been in conflict which have pointed up the fact that there simply are inadequate supplies of water to meet all of the growing demands for the Columbia River. The development of additional storage in the basin could help, at least in part, to meet the growing demand for additional water supplies. The Columbia River and Tributaries Study (CR&T) is investigating a number of potential projects and programs to supplement the existing system while also formulating an overall system plan to insure that the Columbia River and its tributaries will be operated and managed in an optimum manner and in the public's best interest. Due to the vital importance of the Columbia River to the Pacific Northwest, it is essential that a system plan for the operation and management of the river be developed. It is our understanding that an additional $179,000 could be used during FY 1985 to accelerate completion of the Columbia River System Plan.

The PNWA has had a long standing interest in extending Columbia River navigation from the Tri-Cities area to Wenatchee. To fully extend navigation to the Wenatchee area would require the installation of locking facilities at the three existing dams of Rock Island, Wanapum, and Priest Rapids, and providing navigation through the unimpounded Hanford Reach of the Coumbia River.

PNWA understands that an additional $35,000 could be used in FY 1985 to accelerate detailed studies of navigation through the Hanford Reach. Also, it is our further understanding that additional funds in the amount of $219,000 could be used to expedite reports on needed storage and energy projects in the Columbia River Basin.

PNWA supports continuation of the Columbia River and Tributaties Study and strongly urges that funds in the amount of $433,000 be added to the FY 1985 budget request for the Columbia River and Tributaries Study.

GENERAL INVESTIGATIONS - CONTINUING STUDIES

Rivers and Harbors in Alaska

FY 1985 Budget Amount	$845,000
Additional Recommended for FY 1985	$226,000

The State of Alaska encompasses a land area of 586,400 square miles, has a general ocean coastline of 4,750 miles, and is made up of several large river basins and numerous coastal drainages. The state is experiencing vast physical and economic changes based increasingly on the development and use of its natural resources. For example, growth in mineral exploration and extraction, diversification of the fishing industry to harvest bottomfish, and changed timber harvesting practice coupled with their associated social-economic demands are causing an accelerated need for navigation improvements, flood damage reduction, low-cost power, and additional water supply.

The Rivers and Harbors in Alaska study is addressing these current and potential future water resource problems and needs. In FY 1984, funds are being utilized to continue detailed feasibility studies for harbor and channel improvements at Akutan/Unalaska, Atka, King Cove and False Pass to support development of an American bottomfishing industry. In addition, interim studies of shallow-draft navigation on the Yukon-Kuskokwim River system and harbors to service the Bristol Bay fishing industry are being conducted. Also, an interim feasibility report on the merits of Federal hydropower development of southeast Alaska will completed in FY 1984. FY 1985 funds will be used to continue the bottomfish and channel improvement studies, as well as work on the Yukon-Kuskokwim Navigation and Bristol Bay Fishing harbor interims.

The need for navigation improvements at ports expected to serve off-shore oil and gas exploration and supply vessels, and a review of energy needs for isolated communities located close to potential hydropower sites will also be investigated. The PNWA strongly supports additional FY 1985 funds in the amount of $226,000 to advance completion of feasibility reports on False Pass Bottomfish, and comphrehensive studies for Bristol Bay, Yukon-Kuskokwim, Coastal Oil and Gas, and the Hydropower Review.

GENERAL INVESTIGATIONS - NEW STUDY START

Coos Bay, Oregon

FY 1985 Budget Amount	0
Amount Recommended for FY 1985	$240,000

The Coos Bay deep-draft navigation channel, serving southwest Oregon, is a vital transportation link between domestic producers and foreign markets. The continuing export of forest products and other products helps balance our international trade deficit and provide employment opportunities to the area which is currently experiencing nearly 20 percent unemployment. The channel service the needs of the people in six Oregon counties including seven major cities. Because of increased water traffic and larger vessels, the traffic at the International Port of Coos Bay is subject to costly delays due to a constricted channel and a narrow railroad bridge. This results in higher ocean freight costs. The PNWA supports the Coos Bay, Oregon study and strongly urges that funds in the amount of $240,000 be provided in the FY 1985 budget request to initiate this important study.

GENERAL INVESTIGATIONS - CONTINUATION OF PLANNING & ENGINEERING STUDIES

McNary Lock & Dam, Second Powerhouse, Oregon and Washington

FY 1985 Budget Amount	0
Amount Recommended for FY 1985	$800,000

This project consists of modifying McNary Lock and Dam by the addition of a six-unit second powerhouse to the south end of the existing powerhouse. The units will each have a generating capability of almost 124 megawatt (MW)(107.5 MW name plate) for a total added capacity of 742 MW. The project will also include levee access and improvements in the Pasco-Kennewick-Richland area, relocation and improvement of visitor facilities located near the powerplant, compensation for fish and wildlife habitat losses on McNary Reservoir and in the upper John Day Reservoir, and construction of an anadromous fish hatchery for compensation of losses resulting from operation of the proposed project.

Early completion of the McNary Second Powerhouse would provide needed generating resources for the Pacific Northwest Power System to serve load requirements in the later 1980's and thereafter. Average annual power benefits from this project are estimated to be $89,192,000.

PNWA urges Congress to appropriate $800,000 of funds in FY 1985 to complete preconstruction planning and to also expedite authorization for the construction of this project.

CONSTRUCTION, GENERAL - NEW CONSTRUCTION

Bonneville Navigation Lock, Oregon and Washington

FY 1985 Budget Amount	$ 0
Amount Recommended for FY 1985	$7,000,000

This proposed project consists of a new navigation lock at Bonneville Dam on the Oregon shore, south of the existing lock and powerhouse. The new lock chamber would have horizontal dimensions of 86 feet by 675 feet, matching the dimensions of the seven other locks on the Columbia-Snake River Navigation System. The new lock would have a depth of at least 15 feet over the lower lock sill. Both an upstream and downstream approach channel would be constructed having vertical concrete guidewalls.

Operation of the proposed navigation lock would result in faster, more efficient movement of tows and barges through Bonneville Lock. The improved lock alignment would add a measure of safety for barge tows and other water craft approaching Bonneville Lock. The Columbia-Snake River Navigation System could then be utilized to its full potential.

Since FY 1984 funds will esentially complete initial planning and engineering, the Association is worried about the fact that funds for this project are not included in the FY 85 budget request and strongly urges Congress to expedite authorization for the construction of this project and to appropriate funds totaling $7,000,000 in FY 1985. This amount would be used to initiate and complete plans and specifications and initiate construction of this urgently needed new navigation lock.

CONSTRUCTION GENERAL - RESUMPTION OF CONSTRUCTION

Elk Creek Lake, Oregon

FY 1985 Budget Amount	$ 0
Amount Recommended for FY 1985	$18,000,000

The Elk Creek Lake project would be operated with the existing Lost Creek Lake project as a two-dam system to provide flood control, water supply, fish and wildlife enhancement, water quality control, recreation, and irrigation. The Elk Creek Project would control runoff from about 132 square miles upstream of the Elk Creek site. Average annual benefits are estimated to be $5,444,000. Congress added $1,200,000 under the FY 1983 Continuing Resolution Authority to resume construction for Elk Creek Lake. However, the continuation of construction for this project was not included in FY 1984 or the FY 1985 budget request. PNWA strongly recommends that funds in the amount of at least $18,000,000 be appropriated to allow a resumption of construction for this important project in FY 1985.

CONSTRUCTION GENERAL - CONTINUING CONSTRUCTION

John Day Lock & Dam, Oregon and Washington

FY 1985 Budget Amount	$ 5,700,000
Additional Recommended for FY 1985	$ 6,900,000

Upgrading of juvenile fish passage systems at the eight Corps lower Snake and Columbia Rivers projects is a vital part of the Northwest Power Planning Council's Fish and Wildlife Program. The Corps now has substantial juvenile fish facilities at Lower Granite, Little Goose, McNary and Bonneville Dams and has initiated construction of a juvenile facility at John Day Dam.

In FY 1984 Congress increased the funding for this urgent work at John Day from the budget request of $4,500,000 to the full capability of $13,800,000.

Similarly, this year PNWA urges Congress to again fund this work to the Corps full capability at John Day. Thus, PNWA requests that $6,900,000 be added to the budget request to advance the work and completion of the juvenile fish bypass system by one year.

26 March 1984

DEPARTMENT OF THE ARMY
NORTH PACIFIC DIVISION, CORPS OF ENGINEERS
Program for Fiscal Year 1985

Study	Type of Study 1/	FY 1985 Budget Request	Corps Reported Add'l Cap. Above the Budget Amount
GENERAL INVESTIGATIONS			
Continuing and Resumption Studies			
Chehalis River & Tribs, WA	FDP	$ 100,000	$ 120,000
Columbia River & Tribs, ID, MT, OR, WA, & WY	FDP	1,649,000	433,000
Columbia River Coal Export Channel, Astoria, OR	N	147,000	453,000
Coos Bay, OR	N	0	240,000
Galena Bank Stablization, AK	FDP	90,000	0
Mill Creek, WA	FDP	225,000	115,000
Northwest AK Harbors	N	0	135,000
Palouse River & Tribs, ID & WA	FDP	0	100,000
Powder River & Tribs, OR	FDP	0	200,000
Puget Sound & Adjacent Waters, WA	C	420,000	450,000
Rivers & Harbors in AK	FDP	845,000	226,000
Rogue River at Gold Beach, OR	N	0	90,000
Seattle Harbor, Duwamish WW, WA	N	150,000	150,000
Small Hydroelectric Plants, AK	FDP	621,000	129,000
Snohomish River, WA	N	140,000	0
Southcentral Region, AK	N	196,000	95,000
Umpqua River & Tribs, OR	FDP	300,000	0
Upper Snake River & Tribs, ID & WY	FDP	457,000	397,000
Willamette River Basin, OR	C	340,000	90,000
Yakima Valley Regional Water Management, WA	FDP	0	300,000
Subtotal, Continuing and Resumption Studies		$ 5,680,000	$ 3,723,000
Continuation of Planning and Engineering Studies			
Bethel Bank Stablization, AK	FDP	$ 250,000	$ 0
Blair & Sitcum Waterways, WA	N	0	326,000
Blue River Powerhouse, OR	MP	0	900,000
Centralia, WA	N	0	400,000
Chehalis River at South Aberdeen and Cosmopolis, WA	FDP	300,000	300,000
East, West, & Duwamish Waterways, Seattle Hbr, WA	N	0	800,000
Grays Hbr, Chehalis, & Hoquiam Rivers, WA	N	0	1,900,000
St. Paul Island Harbor, AK	N	0	400,000
Wynoochee Hydropower/Fish Hatchery, WA	MP	0	500,000
Yakima River at Union Gap, WA	FDP	250,000	0
Subtotal, Continuation of Planning and Engineering Studies		$ 800,000	$ 5,526,000
Planning and Engineering			
Peninsula Drainage District No. 2, OR	FC	$ 0	$ 300,000
Wenatchee Canyons 1 & 2, WA	FC	0	50,000
Zintel Canyon Dam, WA	FC	0	500,000
Subtotal, Planning and Engineering		$ 0	$ 850,000
TOTAL - GENERAL INVESTIGATIONS		$ 6,480,000	$10,099,000

1/ FDP - Flood Damage Prevention; N - Navigation; MP - Multiple Purpose; FC - Flood Control

26 March 1984

DEPARTMENT OF THE ARMY
NORTH PACIFIC DIVISION, CORPS OF ENGINEERS
Program for Fiscal Year 1985

Study	Type of Project 1/	FY 1985 Budget Request	Corps Reported Add'l Cap Above the Budget Amount
CONSTRUCTION, GENERAL			
Engineering & Design			
Kake Harbor, AK	N	$ 25,000	$ 0
Continuing Construction			
Bonneville Power Units, OR & WA 2/	MP	0 2/	0 2/
Bonneville 2nd Powerhouse, OR & WA	MP	9,000,000	0
Chena River Lakes, AK	FC	9,700,000	0
Chief Joseph Additional Units, WA	MP	13,000,000	2,200,000
Dworshak Dam & Reservoir, ID	MP	2,746,000	0
Elk Creek Lake, OR 3/	FC	0 3/	0 3/
John Day Lock & Dam, OR & WA	MP	5,700,000	6,900,000
Lake Washington Ship Canal, WA (Major Rehab)	N	1,005,000	0
Lower Columbia River Basin Bank Protection, OR & WA	FC	2,200,000	0
Lower Snake River F&WL Comp Plan, WA, ID, & OR	MP	17,700,000	0
Mill Creek Lake, WA (Major Rehab)	FC	2,100,000	0
Mt. St. Helens and Vicinity, WA (Interim Flood Control)	FC	0	37,400,000
Siuslaw River & Bar, OR	N	8,600,000	0
Snettisham, AK	MP	10,000,000	23,000,000
Strube Lake & Cougar Add'l Unit, OR 2/	MP	0 2/	0 2/
Willamette River Basin Bank Protection, OR	FC	1,050,000	0
TOTAL CONSTRUCTION, GENERAL		$82,826,000	$69,500,000

1/ FDP - Flood Damage Prevention; N - Navigation; MP - Multiple Purpose; FC - Flood Control
2/ Proposed for non-Federal financing
3/ Project does not meet economic selection criteria

DEPARTMENT OF THE ARMY
NORTH PACIFIC DIVISION, CORPS OF ENGINEERS
Program for Fiscal Year 1985

26 March 1984

Project/Function	FY 1985 Budget Request	Additional Above Capability Budget Amount
OPERATION AND MAINTENANCE		
NAVIGATION		
a. Channels & Harbors		
Anchorage Harbor, AK	1,836,000	420,000
Bellingham Harbor, WA	45,000	
Bethel Harbor, AK	0	100,000
Chetoo River, OR	866,000	
Col & Lwr Willamette R below Vancouver, WA & Portland, OR	14,736,000	
Col R btwn Vanc/The Dalles, WA, OR	327,000	
Columbia R @ Mouth, OR & WA	4,197,000	1,500,000
Columbia River @ Baker Bay, WA	207,000	
Columbia River btwn Chinook & Sand Island, WA	303,000	
Coos & Millicoma Rivers, OR	194,000	
Coos Bay, OR	5,230,000	
Coquille River, OR	666,000	
Depoe Bay, OR	50,000	
Dillingham Harbor, AK	571,000	
Dry Pass, AK	0	640,000
Ediz Hook, WA	1,635,000	1,250,000
Grays Harbor & Chehalis River, WA	3,390,000	900,000
Homer Harbor, AK	290,000	
Ninilchik Harbor, AK	268,000	
Nome Harbor, AK	716,000	
Port Orford, OR	162,000	178,000

Project/Function	FY 1985 Budget Request	Additional Above Capability Budget Amount
NAVIGATION (cont'd)		
a. Channels & Harbors (cont'd)		
Puget Sound & Trib Water, WA	$ 785,000	
Quillayute River, WA	2,125,000	485,000
Rogue River Harbor @ Gold Beach, OR	1,003,000	
Seattle Harbor, WA	490,000	
Siuslaw River, OR	1,879,000	
Skipanon Channel, OR	286,000	
Stikine River, AK	18,000	
Tillamook Bay & Bar, OR	242,000	
Umpqua River, OR	898,000	
Willapa R & Hbr & Naselle R, WA	20,000	340,000
Yaquina Bay & Harbor, OR	816,000	
Subtotal - Channels & Harbors	$44,251,000	$ 5,813,000
b. Locks & Dams		
Lake Washington Ship Canal, WA	2,993,000	1,000,000
Will. R @ Will. Falls, OR	526,000	0
Subtotal - Locks & Dams	3,519,000	1,000,000
TOTAL NAVIGATION	$47,770,000	$ 6,813,000

DEPARTMENT OF THE ARMY
NORTH PACIFIC DIVISION, CORPS OF ENGINEERS
Program for Fiscal Year 1985

26 March 1984

Project/Function	FY 1985 Budget Request	Additional Above Capability Budget Amount
OPERATION AND MAINTENANCE (Cont'd)		
FLOOD CONTROL		
a. Reservoirs		
Applegate Lake, OR	$ 524,000	
Blue River Lake, OR	188,000	
Chena River Lakes, AK	928,000	
Cottage Grove Lake, OR	772,000	
Dorena Lake, OR	445,000	
Fall Creek Lake, OR	272,000	
Fern Ridge Lake, OR	647,000	
Howard A. Hanson Reservoir, WA	711,000	
Lucky Peak Lake, ID	636,000	475,000
Mill Creek Lake, WA	350,000	
Mud Mountain Dam, WA	975,000	
Schedule Res. Operations:	348,000	
Willow Creek, OR	168,000	
Wynoochee Lake, WA	1,127,000	200,000
Subtotal - Reservoirs	$8,091,000	$675,000
b. Channel Improvements, Inspections, and Miscellaneous Maintenance		
Inspection of Completed Works	637,000	
Stillaguamish River, WA	100,000	
Tacoma, Puyallup River, WA	50,000	
Willamette R Bank Protection, OR	173,000	
Subtotal-Channel Improvements, Inspections & Misc Maintenance	$ 960,000	$ 0
c. Inspection of Non-Federal Levees	177,000	0
TOTAL FLOOD CONTROL	$9,228,000	$675,000

Project/Function	FY 1985 Budget Request	Additional Above Capability Budget Amount
MULTIPLE-PURPOSE POWER PROJECTS		
Albeni Falls Dam, ID	$ 2,216,000	$ 500,000
Bonneville Lock & Dam, OR & WA	11,568,000	900,000
Chief Joseph Dam, WA	6,752,000	
Cougar Lake, OR	686,000	
Detroit Lake, OR	1,411,000	
Dworshak Dam & Reservoir, ID	5,761,000	
Green Peter-Foster Lakes, OR	2,141,000	
Hills Creek Lake, OR	865,000	
Ice Harbor Lock & Dam, WA	4,620,000	331,000
John Day Lock & Dam, OR & WA	13,497,000 1/	770,000
Libby Dam, Lake Koocanusa, MT	3,190,000	347,000
Little Goose L&D, Lake Bryan, WA	3,569,000	1,481,000
Lookout Point Lake, OR	2,427,000	
Lost Creek Lake, OR	2,423,000	
Lower Granite Lock & Dam, WA	5,375,000	
Lower Monumental Lock & Dam, WA	3,998,000	
McNary Lock & Dam, OR & WA	11,338,000	660,000
The Dalles Lock & Dam, WA & OR	8,191,000	
TOTAL MULTIPLE-PURPOSE POWER PROJECTS	$ 90,028,000	$4,989,000
PROTECTION OF NAVIGATION		
General Regulatory Functions	5,373,000	0
Project Condition Surveys	1,315,000	0
TOTAL PROTECTION OF NAVIGATION	$ 6,688,000	$ 0
TOTAL OPERATION AND MAINTENANCE	$153,714,000	$12,477,000

1/ Includes $6,000,000 for powerhouse Major Rehabilitation

BUREAU OF RECLAMATION BUDGET

FISCAL YEAR 1985

PROJECT SUMMARY, PNW

Pacific Northwest Region Summary

In Idaho the fiscal 1985 construction program request is for $4,010,000 which includes beginning of the preconstruction work on modifications of the sluiceways for installation of high pressure gates and valves at Arrowrock Dam; continuance of preconstruction work on an auxiliary spillway to pass the design flood flows at Black Canyon Dam; continuance of construction on minimum health and safety facilities at Cascade and Black Canyon Reservoirs; completion of dam safety modifications at Island Park Dam; and beginning construction on a causeway across the existing tailrace to provide construction access to the site of the Palisades Powerplant Enlargement. Design data will also be finalized and final designs will be initiated on turbines, generators, and the powerplant structure at Palisades.

Continuation of the North Side Pumping Division Extension and the Boise Project Power and Modification Study are among the investigations which will be continued with the $510,000 requested for the Idaho planning program. The operation and maintenance program in Idaho asks for $2.2 million for the Boise Project and $3.3 million for the Minidoka Project.

The Hungry Horse Powerplant Enlargement and reregulating reservoir is the major study being conducted within the Pacific Northwest Region in Montana. Operation and maintenance funds for the Hungry Horse Project totaling $1.382 million have been requested.

One item for $45,000 has been requested for the construction program within the Pacific Northwest Region in Oregon to complete modifications to the intake channel to correct a siltation problem on the Tualatin Project. Fourteen million dollars has been requested for construction of the Galesville Dam under the loan program.

Funds have been requested to continue project investigations for the Farmers Irrigation District; Siletz River Basin; and the Umatilla Basin Project.

Operation and maintenance funds for the Boise, Crooked River, Rogue River, Tualatin, and Umatilla Projects, all within the Pacific Northwest Region in Oregon, have been requested in the amount of $450,000.

Construction funds of just over $93.74 million have been requested for the State of Washington. For the Oroville-Tonasket Unit $14.78 million has been requested for land and right-of-way acquisition and continuance of construction on the Osoyoos distribution system. Also, contracts are expected to be awarded for development of facilities for the steelhead fishery enhancement and for wildlife mitigation.

For the Columbia Basin Project $53.17 million has been requested. The irrigation facilities program provides for minor completion work on Block 26 laterals and bearing modifications on pump generator units 7 and 8. Work on essential drainage and supplemental construction on the Columbia Basin Project will continue as will preconstruction activities on the deferred and bypassed lands and East High Canal irrigation system. Also, a contract will be awarded for enlargement of a portion of the West Canal.

At the Third Powerplant at Grand Coulee Dam, work on the downstream riverbank stabilization, minor completion and modification work on the powerplant, and replacement and installation of defective circuit breakers will continue.

For the Okanogan Irrigation District $4.8 million has been requested for work to continue rehabilitation of the pressure pipeline system and modification of the headworks and concrete canal lining.

Funds for four construction items on the Yakima Project have been requested; $600,000 for rehabilitation work on the main pump discharge line, lateral lines, and pumping facilities on the Grandview Irrigation District; $1.034 million for completion of rehabilitation work on replacement of open laterals with buried pipe, installation of a trash screen, replacement of turnout boxes, spillway construction, replacement of lateral pipelines, and canal lining repair for the Granger Irrigation District; $1.061 million on the Outlook Irrigation District for replacement of the main discharge pipeline, construction of the auxiliary pumping plant, and rehabilitation of the main laterals; and $18.3 million for continuing the work on the reregulating dam and the pressure pipeline distribution system on the Yakima-Tieton Irrigation District.

The Yakima River Basin Water Enhancement Project and Yakima Fish Passage and Protective Facilities are the major study items for the fiscal 1985 planning program request. Operation and maintenance funds totaling $18.559 million for the Columbia Basin Project and $2.136 million for the Yakima Project have been requested.

ADDITIONAL PREPARED STATEMENT

Chairman HATFIELD. You mentioned the Port of Portland and the urgent need for the new Bonneville lock—the port has submitted a statement on that project which I will make part of the record at this point.

[The statement follows:]

STATEMENT OF LLOYD ANDERSON, EXECUTIVE DIRECTOR, PORT OF PORTLAND, OREG.

Your Senate Appropriation Energy and Water Development Subcommittee will be holding public hearings on the fiscal year 1985 budget next week. If possible we would like to have this letter submitted for the record--expressing the Port's interest and concern regarding Columbia/Snake River System waterway projects.

BONNEVILLE LOCK PROJECT AUTHORIZATION

One of the top priorities for not only the Port but a number of river/maritime interests is project authorization for a new lock at Bonneville Dam.

A $167 million project authorization bill has been introduced in Congress, and the Port fully supports its passage. The Bonneville project was also included in several omnibus water projects bills that have received considerable support this session. Preliminary soil testing and engineering work has already been done on the project. We remain hopeful for possibilities for passage of the project authorization this session.

The new lock is necessary to make the Bonneville Dam conform with the dimensions of other lock systems of the Columbia/Snake. Other locks on the 465-mile waterway have the dimension of 86 feet by 675 feet, with the exception of Bonneville, which measures 76 feet by 500 feet.

Last year, 9.7 million tons of cargo moved through these locks, first constructed in 1938. According to the Army Corps of Engineers, the lock capacity is 13 million tons annually. At the present growth rate, the locks will be reaching capacity by the end of the decade. Even now, congestion is becoming a growing problem, underscoring the importance of the project.

While there have been year-to-year fluctuations in carge volume, grain movements through Bonneville Lock have more than quintupled since 1960. During the 1960s, Bonneville Lock handled about 18 percent of Pacific Northwest wheat exports. Clearly, Bonneville Lock is playing an increasingly important role in our regional and national transportation network.

Early in 1983, the Columbia/Snake ports hired a consultant, Ogden Beeman, to provide industry perspective for the Corps of Engineers forecasts of Bonneville Lock grain movements. A copy of Beeman's report, Projection of Grain Movements through Bonneville Lock - Year 2005 is enclosed.

Beeman's study assumes that there will be some modal shift from truck to barge in future grain exports. Barge will be handling an additional 5 percent, about 50 percent of all future Pacific Northwest grain exports. Grain volume through Bonneville Lock is projected to be about 7.43 million tons in 1990 and 9.45 million tons in 2000.

Bonneville Lock is a serious constraint to barge movements and our region's role in international trade. With the projected tonnages that we can expect, the existing Bonneville Lock will become an even greater impediment.

The obvious objective is Congressional authorization of the project. Pending that, however, we urge efforts to permit continued forward movement of this project until authorization occurs—specifically, identification and support to permit certain aspects of work to proceed: rail relocation work, preparation of the final specifications necessary to put the project out to bid, and excavation work. Without some action, all work on the project will come to an end this summer.

MOUNT ST. HELENS

There is an urgent need to get on with the authorization and construction of the permanent solution for sediment retention. Congress should direct the Corps to proceed with detailed engineering and design for the Single Retention Structure and appropriate funds for that project.

The U.S. Corps of Engineers released its report, "A Comprehensive Plan: For Responding to the Long-Term Threat Created by Eruption of Mount St. Helens, Washington" in mid-November 1983. Subsequently, the Portland District Engineer held five public hearings during the week of December 5, 1983, in various locations in southwest Washington.

Although a wide variety of views, opinions, facts, and emotions were expressed during those public hearings, a clear consensus among the region's governmental, civic, and service organizations emerged. Overwhelming support was given to supporting immediate actions to deal with both the Spirit Lake concern and sediment retention in the Toutle Basin.

Following a meeting with Oregon and Washington Senators, Assistant Secretary Gianelli stated he was, based upon the public input the Corps had received, "leaning" toward supporting the Single Retention Structure as the way to proceed with capturing the sediment erosion flowing down the Toutle/Cowlitz (February 1 Oregonian story). It was indicated, however, that he felt additional studies were needed to re-examine the capacity potential for the Multiple Retention Structures and the staging capabilities of the Single Retention Structure. So it was his view to have the feasibility study proceed, with an October 1984 completion date.

More is needed than this effort. There is a need to formalize and obtain the firm commitment of Assistant Secretary Gianelli not only of "leaning" toward a Single Retention Structure, but in fact that specific directions have been given to the Portland District Engineer to proceed, on a fast-track basis, with feasibility work, environmental work, and Advanced Design work. Without a firm action plan, the rhetoric will result in simply delaying action. Action is needed in the fiscal year 1985 budget.

MOUTH OF THE COLUMBIA RIVER BAR DEEPING

The Congress authorized and appropriated funds to deepen the Bar from its present minus 48 feet to minus 55 feet. The bid award occurred in March 1984 and actual dredging is to commence in early May, with a completion date of October 1984. The Port sees this project as having major positive impacts on future cargo movements, and we simply wanted to say "thank you" for your efforts to move this project forward.

NAVIGATION CHANNEL STUDIES

Ocean vessel traffic on the Columbia River navigation channel has been limited not only by the 40-foot draft river channel authorized and maintained, but by the Columbia River Bar, which was authorized and maintained at 48 feet. The 48-foot Bar was out of synch with the 40-foot river channel. Consequently, only 36- to 38-foot draft loaded vessels typically have transited the Bar. With the Bar deepening project about to commence, efforts are now being focused on the need to maximize the full utilization of the 40-foot river channel.

Consequently, an effort has been under way to define and move forward on a study to identify and implement management strategies and techniques to accomplish this.

Also, the Columbia River Pilots Association, the Pacific Northwest Waterways Association, and the Oregon Governor's Advisory Committee on Maritime Affairs have called for a study on the need for additional anchorages on the Columbia River. The Port of Portland has agreed to be the local sponsor of a Corps of Engineers study on the issue.

We would urge, therefore, the fiscal year 1985 budget recognize these studies. Does the Corps' budget provide funds for the Corps to undertake to develop management strategies and techniques to maximize the availability of the 40-foot channel, so that 40-foot draft vessels can consistently call on the river?

We appreciate your efforts and leadership in supporting the development and growth of the Columbia/Snake River System. The projects mentioned above will permit the system's continued growth.

If you have any questions or would like additional information, please let me or Tom Zelenka know.

PROJECTION OF GRAIN MOVEMENTS THROUGH BONNEVILLE LOCK—YEAR 2005

PREPARED BY OGDEN BEEMAN & ASSOCIATES, INC., PORTLAND, OREG.

INTRODUCTION

The Columbia-Snake River navigation system provides the route for the waterborne movement of commerce from Lewiston, Idaho downstream to the Pacific Ocean. Historically, wheat has been grown in the Columbia Basin since the mid-1800's and as access to world markets improved, the export of wheat from Pacific Northwest ports has become a major commodity movement. From 1938, with construction of Bonneville Lock to completion of Lower Granite in 1975, the navigation system has been improved and has greatly expanded the tributary area for barge movement of grains. With extension of navigation on the Snake River to Lewiston, Idaho additional tonnage of wheat and barley from Washington, Idaho, Montana and North Dakota (with minor amounts from other states) now moves downstream through Bonneville Lock. To illustrate the rapid growth in grain movement through Bonneville, in the decade 1960 to 1970 tonnage increased 0.6 million tons to 1.5 million tons while in the decade 1970 to 1980 tonnage increased 3.6 million tons to 5.1 million tons in 1980. Historical grain tonnages are shown in Table 1.

TABLE 1
GRAIN MOVEMENTS THROUGH BONNEVILLE LOCK
(1,000 Short Tons)

YEAR	GRAIN MOVEMENT
1940	43.5
1945	25.7
1950	93.7
1955	264.6
1960	910.3
1965	1,253.7
1970	1,531.4
1975	2,693.7
1976	3,607.8
1977	3,345.6
1978	4,541.9
1979	4,330.6
1980	5,135.9
1981	5,679.2
1982	4,931.4

Source: U.S. Army Corps of Engineers

Grains include wheat, barley and rye; wheat is the predominant grain grown in the Pacific Northwest with more than 90 percent of some 11 million acres devoted to wheat, with some acreage in barley and very minor amounts in rye. Barley shipments through Bonneville were up markedly in 1981 and 1982. Production in the four state tributary area in terms of both acreage and yields per acre has expanded rapidly in the 1960-1980 period to meet world market demand. With the 1982 average of 45.6 bushels of wheat per acre on 10.5 million acres, production was 480 million bushels or 14.4 million short tons. World demand for grains is expected to continue, with the Pacific Rim nations' demand leading the rate of expansion in the 1980-year 2000 period.

As an aid in the review and update of the feasibility report prepared by the Corps of Engineers for construction of a new lock at Bonneville, the following paragraphs provide a review of previous report projections, and an analysis of the tributary area for grains and production capabilities plus inshipments from the Midwest.

Review of Previous Report Projections

The feasibility report prepared by the Corps of Engineers in 1977 (1) projected grain traffic to increase from 4.78 million tons in 1990 to 5.75 million tons in the year 2000. These projections were generally low; with actual shipments in 1981 exceeding the year 2000 projections. These original forecasts were based on actual acreage seeded in the four state tributary area for the period 1975-1977 with an increase of yields per acre of about 1.2% annually. The report makes no mention of any inshipments of Midwest wheat for the period of analysis. In an addendum to the feasibility report (2) grain forecasts were updated and increased to 6.72 million tons in 1990 and 7.42

Footnotes at end of article.

million tons for the year 2000. These revised projections adjusted the base year, 1980, upward to account for structural shifts in traffic. From that base, the annual projected growth rates are slightly higher than those in the feasibility report for the 1980-2000 time period.

In the Oregon Ports Study report prepared in 1980 (3) grain to be exported from Oregon ports was projected to grow at an annual rate of about 3.9%. This forecast was based on an annual increase of 1.9% in acres planted and a 1.9% increase in yield per acre. The report also indicates a low scenario of 1.9% assuming only an increase in yield with no growth in acres under cultivation to a high scenario growth rate of 5.8%, the historic growth rate of wheat exports from Lower Columbia ports. However, it is not anticipated this high growth rate will continue indefinitely into the future. The report mentions the substantial quantities of Midwest wheat and feed grains which move to PNW ports for export. However, such Midwest wheat movements are not quantified or included in the forecast of future wheat movements.

In the Columbia/Snake River System Ports Development planning study report (1982) (4) grain traffic through Bonneville Lock was projected to range from 6.5 to 7.2 million tons in 1990 increasing to a range of 8.3 to 9.3 million tons in the year 2000. These projections reflect production from the four state tributary area plus inshipments from the Midwest. Annual growth rates are 4.5% to a high of 7% for the period 1980-90 and 3% to 3.2% for the 1990-2000 period. The high projection reflects a greater increase and share of total wheat exports for wheat from the Midwest. These projections were based on market demand studies adjusted by the supply potential of the tributary region.

Footnotes at end of article.

In the 1980 Washington State Ports Study (5) wheat exports from Washington ports were projected to grow from 2.9 million tons in 1979, to 15.2 million tons in 1990 and 24.4 million tons in the year 2000. These forecasts were not allocated to sub-regions and the contribution of the Columbia-Snake river system to these total exports cannot be ascertained. Therefore, comparison of forecasts with the other reports was not possible.

Review of the three different mid-range or "best" projections show a range of 6.5 to 7.6 million tons by 1990 and a range of 7.4 to 11.2 million tons for the year 2000.

In the following sections we have reviewed the available data to reach a realistic projection for Bonneville Lock grain traffic.

WHEAT PRODUCTION IN THE PACIFIC NORTHWEST

Production Area Defined

We have examined the production of wheat from the four state area of Oregon, Washington, Idaho and Montana. The wheat growing areas of these states and their relationship to the Columbia-Snake navigation system is shown in Figure 1. The wheat grown in this region is primarily "soft white" which is used for such products as cakes, pastries and noodles, and the "hard red" varieties, high protein grains used for breads. The hard wheats tend to originate in Montana and North Dakota while the soft wheats generally originate in Oregon, Washington and Idaho.

Wheat production from the four state area has constantly increased over the years. This increase is attributable to both an increase in acres harvested and yield expressed in bushels per acre. Tables 2 and 3 provide a general picture of the growth

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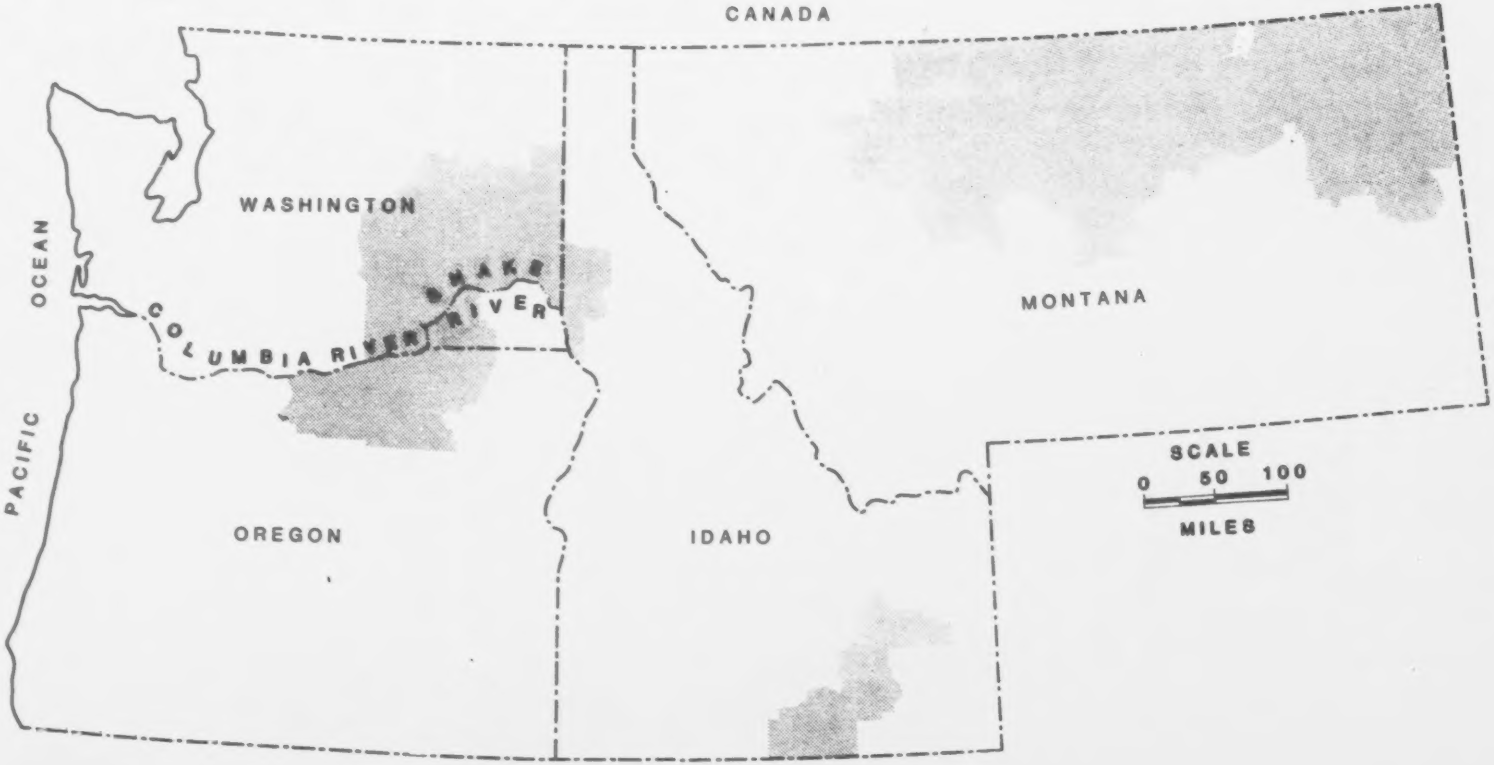
Footnotes at end of article.

Figure 1: Wheat Producing Areas, Pacific Northwest


CANADA
WASHINGTON
OREGON
IDAHO
MONTANA
PACIFIC
OCEAN
COLUMBIA RIVER
SNAKE RIVER
SCALE
0 50 100
MILES

in both acres and yields over the 20 year period from 1962 to 1982. While any given year might differ greatly from the trend, Tables 2 and 3 illustrate the magnitude of the gains made over the 20 years. Acres planted will fluctuate greatly with price or the farmer's perception of future price. Yields will fluctuate with technology including both fertilizer use, seed research and irrigation. The steady gains in yields per acre over the years parallels a similar situation in the overall U.S. production, as well documented elsewhere. (See, for example, the Oregon Port Study-1980.)

TABLE 2
WHEAT ACREAGE HARVEST - PACIFIC NORTHWEST
(1000 Acres)

	1962	1972	1982
Oregon	680	879	1,200
Washington	1,697	2,602	2,480
Idaho	957	958	1,500
Montana	3,465	3,704	5,360
Total	6,799	8,143	10,540

TABLE 3
YIELDS IN BU/ACRE

	1962	1972	1982
Oregon	38.6	41.9	53.8
Washington	39.4	46.9	48.9
Idaho	38.3	46.2	62.8
Montana	22.6	26.7	34.2
AVG	30.6	37.1	45.6

TABLE 4
PERCENT OF PNW PRODUCTION

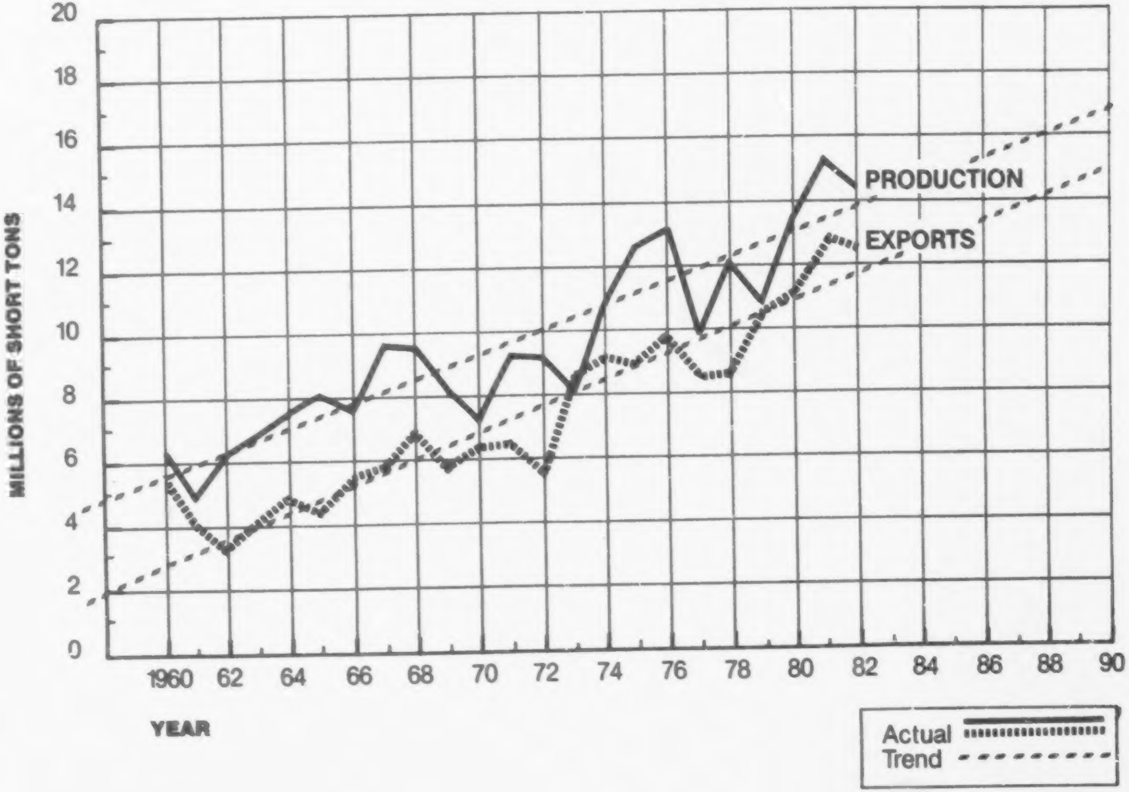
	1962	1972	1982
Oregon	12.6	12.2	13.4
Washington	32.1	40.4	28.9
Idaho	17.6	14.6	19.6
Montana	37.6	32.7	38.2

Source: U.S.D.A. Crop Reporting Statistics

Production and Exports

Overall production from the four state region has grown steadily in the past 20 years. Given the magnitude of market and natural forces affecting production, the curve of production since 1960 shows remarkably steady growth shown in Figure 2.

Figure 2: Production and Export of PNW Wheat in Millions of Short Tons



Equally impressive is the steady growth in wheat exports from Pacific Northwest Ports including both the Lower Columbia and Puget Sound. That curve is also shown in Figure 2. The source data for this curve was the U.S.D.A. Weekly Grain Market News and reflects some crop year reporting.

The tendency for the two lines in Figure 2 to be parallel demonstrates an interesting phenomenon. It suggests that exports of Pacific Northwest wheat seem to parallel production which implies that all wheat produced, after a deletion for domestic consumption, is exported. This domestic consumption amounts to an almost steady 2.5 million short tons for the 20 year period examined and represents the difference on the vertical axis of the two curves. Since the amount of PNW wheat not exported tends to be fixed, and production is increasing annually, the percent of wheat production exported is growing substantially over the years. This amount of PNW wheat exported, as a percent of total production, was about 50% in 1960 and rose to over 80% by 1980 (after smoothing the curves for annual fluctuations).

The above observations are somewhat modified by the fact that non-PNW wheat has been flowing into the export system thus driving up the export figures. Nevertheless, looking at PNW production and the parallel export curves suggests a very steady growth and relationship over the 20 year period. The constant differential for domestic consumption also fits the well known fact that food use of wheat in the United States, expressed in total volume, remained essentially unchanged between 1960 and 1975. (See, for example, World Wheat Statistics, 1976.) The 2.5 million short tons of PNW wheat going to consumption represents approximately 15% of U.S. wheat consumption.

A more detailed look at acreage and yield are presented in Figures 3 and 4. Figure 3 shows a steady increase in yield per acre which was noted earlier. Figure 4 demonstrates the elasticity or variability in acres harvested in response to market factors. The low acreage figure of around 7 million acres in 1970 lagged the low wheat prices in 1969. The increase of nearly 50% in acreage between 1970 and 1976 was concurrent with the tremendous jump in wheat prices taking place at that time. Figure 4 should be examined in light of the price information shown on Table 5.

TABLE 5
WHEAT PRICE - HISTORICAL DATA

Crop Year	Current Dollars/Bu	1967 Dollars/Bu
1964	1.83	2.02
1966	1.79	1.84
1968	1.47	1.41
1970	1.48	1.27
1972	2.26	1.80
1974	4.29	2.90*
1977	2.33	1.30

*Price peaked at $3.63 (1967 basis) in 1973.
Source: U.S. Dept. of Commerce, Bureau of the Census

Based on the 20 years of history in the U.S. and the PNW, it seems reasonable to assume a continued increase in yields per acre for wheat. To estimate production, however, requires an analysis to assure that the requisite land, water and yields can be brought together to achieve maximum production.

A 1981 study (6) sponsored by the Northwest Regional Commission attempted just such a comprehensive look at possible production scenarios for the year 2000. Although the state of Montana is not included, it does provide an excellent basis for testing maximum production scenarios. The project utilized a model to analyze production areas, crop and livestock production activities, availability of resources, transportation methods and costs and market demand to estimate production and identify limitations. Excerpts from that study are shown in Table 6.

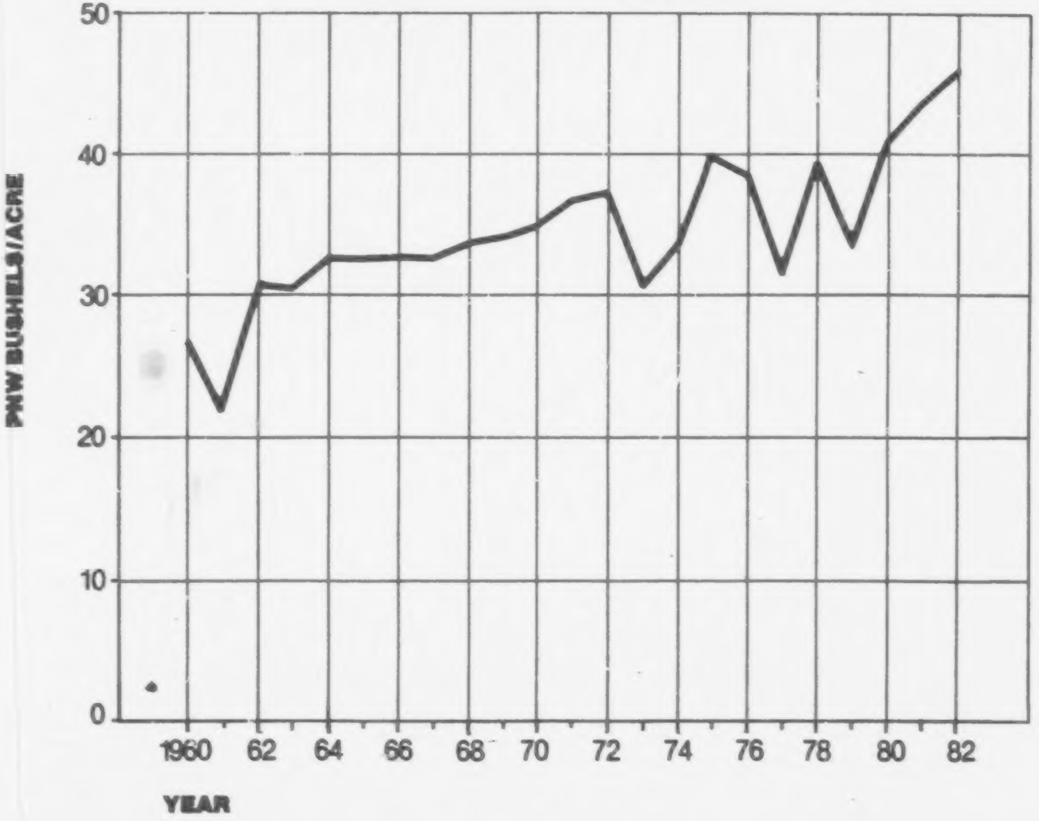


Figure 3: Wheat Production Yields
Bushels/Acre Average for PNW (4-State)

1981

Figure 4: Acreage Harvested of Wheat PNW (4-State) Area

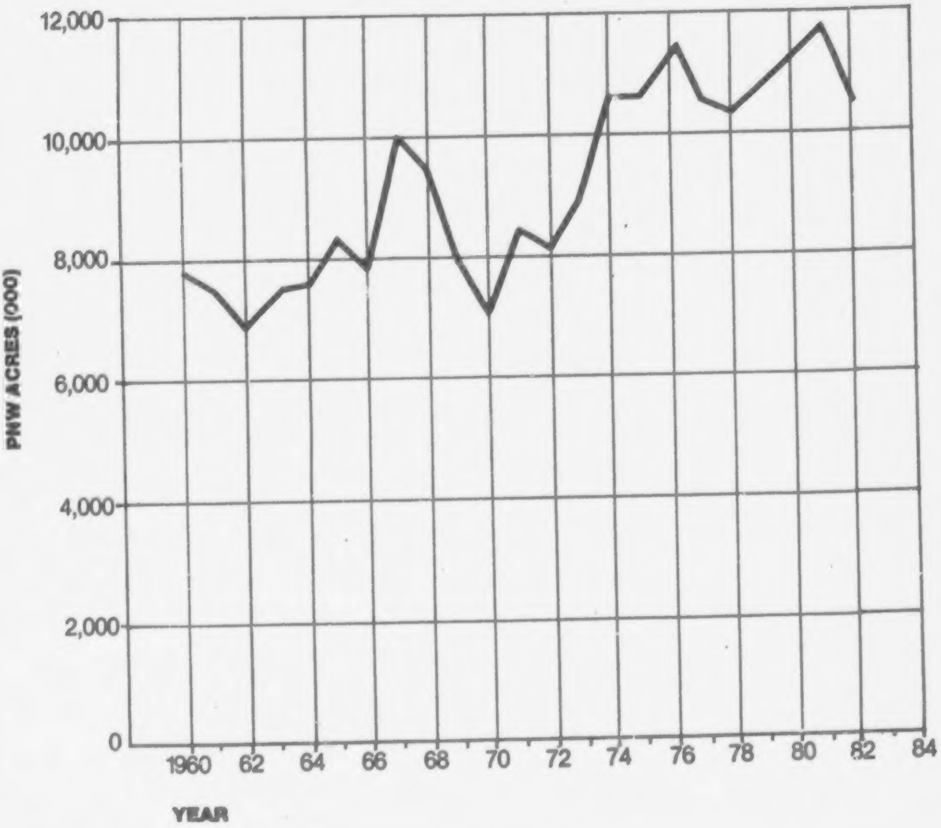


TABLE 6
WHEAT PRODUCTION IN MILLION BUSHELS, OR, WA, ID

Scenario	YEAR 1977	2000
Base Case	257	488
High Export Demand	-	487*
High Irrigated Acreage	-	518
Tech'l Advances	-	518
Rising Energy Costs	-	456
Rising Energy & Labor Costs		405
Moderate Inflation	-	553
High Inflation	-	556

* Basis of 7,427,000 acres and 65.6 Bu/Acre yield.
Source: NW Agriculture Development Project, 1981, Ch. X

Since comparable figures are not available for Montana, we have assumed that the growth rates applicable for the three state region can be utilized to extrapolate production for the four state region, including Montana. Looking at Table 6 suggests that 500 million bushels, a 100% increase or doubling of 1977, is an attainable production figure for wheat after recognizing the other competing uses for land and water resources. This translates to slightly over a 3% annual growth rate in production.

A linear extrapolation of the production curve in Figure 2 results in a 58% growth (from around 13 million in 1980 to 20.4 million tons in 2000) over the 20 year period. During the 1960-1982 period actual production was growing at a rate of around 4% compounded annually. Since the linear projection of production as shown in Figure 2 results in less production than the maximum limits suggested by the NWADP, and is at growth rates less than those experienced in the 1960-1982 period, we have selected it as a realistic, yet conservative, approach to projecting production figures. It results in a year 2000 projection of around 450 million bushels for the three state region for comparison to the various scenarios shown in Table 6. This is based on Montana maintaining a 34% contribution to PNW (3 state) production.

MOVEMENT OF WHEAT

Data on the origins of wheat moving into the PNW for export is not available in a consistent format over the years of interest. However, a 1981 study (7) does provide the basis for understanding movements into the PNW and onto the river for the year 1977. The study purports to be the most comprehensive study of grain movements ever conducted. It was based on data collected from 3,500 grain merchandising, processing and export firms in 41 states.

Footnotes at end of article.

This report provided movements into and out of numerous subsectors throughout the United States. For example, the four PNW states were divided into a total of 17 different subsectors. Wheat originating in each subsector was shown by volume and by mode of transport out of the subsector. Wheat arriving in a subsector was likewise shown.

Table 7 shows the origins of wheat moving into the Lower Columbia River ports by various modes. Compilation of the table from available data required some assumptions which should not affect the accuracy greatly. For example, there is some Idaho and Oregon wheat in the Washington barge origins and vice versa.

Table 8 shows the same information for Puget Sound-destined wheat.

Table 9 shows the results of combining Tables 6 and 7 to show the origin and mode of all wheat moving into the Pacific Northwest.

TABLE 7
ORIGINS OF LOWER COLUMBIA RIVER EXPORT WHEAT
1977 - Bushels (1000s)

ORIGIN	Rail Origin	Truck Origin	Barge Idaho	Barge Wash.	Barge Oregon	TOTAL
Oregon	11,831	5,395			32,623	49,849
Washington	34,160	7,691		84,435		126,286
Idaho	7,972	8,650	12,236			28,858
Montana	12,636	2,133	1,875	6,691		23,335
No. Dakota	17,456	4,758	5,574	840		28,628
All Other	9,055	649				9,704
TOTAL BU's (000)	93,110	29,276	19,685	91,966	32,623	266,660
TOTAL S.T. (000)	2,796	879	591	2,761	980	8,007
% TOTAL	35	11	---------54--------------			

TABLE 8
ORIGINS OF PUGET SOUND EXPORT WHEAT
1977 (1000 bushels)

	Rail
Washington	20,711
Idaho	1,404
Montana	26,415
No. Dakota	2,811
Other	2,701
Total	54,042

TABLE 9
ORIGINS OF PNW WHEAT
1977 (1000 bushels)

	Rail	Truck	Barge	Total	% by State
Oregon	11,831	5,395	32,623	49,849	15.5%
Washington	54,871	7,691	84,435	146,997	45.9
Idaho	9,376	8,650	12,236	30,262	9.4
Montana	39,051	2,133	8,566	49,750	15.5
No. Dakota	20,267	4,758	6,414	31,439	9.8
Other	11,756	649	-	12,405	3.9
TOTAL	147,152	29,276	144,274	320,702	100.0
% by Mode	45.9	9.1	45.0		

Source, Tables 7-9: Wheat Movements in the U.S., NCRRP #2714, 1981

Other available data suggests that the 1977 reporting year is a conservative measure of how much North Dakota wheat is moving west and moving west by truck. The North Dakota Grain and Oilseed Transportation Statistics (1983) show that the trend is towards more wheat moving west and more moving west by truck. For example, in the three (crop) year period 1974-1977 an average of 13% of North Dakota Hard Spring wheat shipments moved west. For the 1979-82 period, this had increased to 18%.

In 1974-75 only 12% of this West-moving wheat was moving by truck. By 1979-82, this figure had grown to 40%. Thus it can be seen that the potential for barge capture of North Dakota wheat has been increasing substantially during the past decade.

MOVEMENTS THROUGH BONNEVILLE LOCK

The decade of the 1970's was one of transition in transport modes for PNW wheat. We have discussed earlier that PNW wheat production and exports grew steadily during this period. While acreage in production was varying with price, the export volumes seemed to progress upward almost in spite of exogenous factors. Concurrently, the transportation of wheat was changing dramatically.

During the decade of the 60's Bonneville Lock handled around 17% or 18% of PNW wheat exports. The opening of Lower Monumental and Little Goose Locks in 1970 began a transition period during which this figure jumped up into the range of 32% prior to the final extension of navigation to Lewiston/Clarkston with the opening of Lower Granite Lock in 1975. As mentioned earlier, in 1977 Bonneville Lock was handling 45% of the wheat coming into the PNW and in the next several years this figure varied between 45% and 40% of PNW exports. Concurrently, PNW exports were growing with the Columbia River ports absorbing all of the growth plus handling most of the wheat which had previously been shipped from Puget Sound. This wheat was shifted to the river primarily under the pressure of new corn movements through Puget Sound displacing the wheat to the river elevators.

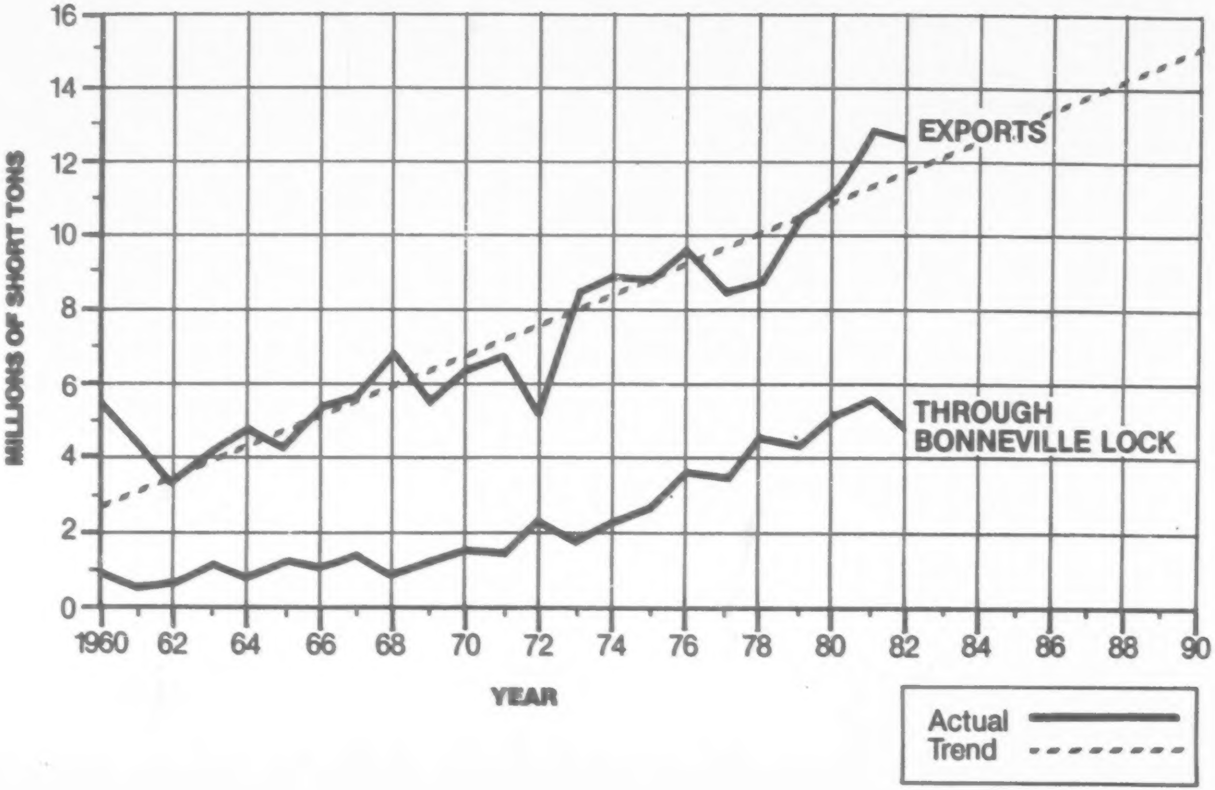
Figure 5 shows the Bonneville Lock movements compared to PNW exports for the 1960 - 1980 period.

Projections of Future Movements

We selected the following methodology to project wheat movements through Bonneville Lock.

1986

Figure 5: PNW Wheat Exports Compared to Bonneville Lock Movements



1. Forecast "PNW" production.

As defined, this means the production of the four state (OR, WA, ID, MNT) region. Recognize that some "leakage" out of the area is compensated for by movements into the area. Check the forecast in the later years to assure it does not exceed the productive capacity of the land, recognizing the steady increases in yields over the years.

A linear regression of PNW production figures results in the formula y = a+bx where y = production, x=number of years from the base year 1960, a and b are constants equal to 5.54 and 0.37 respectively. This equation had a r2 of 0.81 where 1.00 would represent a "perfect" fit of the data. This is considered to be a statistically significant fit for the data over the period considered. Based on this regression equation, production would be as follows:

TABLE 10
PRODUCTION FORECAST

Year	PNW (4 state production) Short Tons
1980 (actual)	13,600,000
1990	16,710,000
1995	18,570,000
2000	20,430,000

Since the three state area of Oregon, Washington and Idaho should be able to supply at least 500,000,000 bushels (15 million short tons) based on the NWADP Report (1981), this leaves 5.43 million short tons or 30% to be supplied from Montana, North Dakota and elsewhere. Montana actually produced this quantity in 1982. If yields increase in these states as they are forecast by the NWADP to increase in Oregon, Washington and Idaho, there should be no problem in producing significantly over 20,430,000 ST in 2000. If the three state region produced 15.0 Million ST and Montana produced its historic 34% of PNW total, this would amount to 22.7 Million ST before addition of North Dakota or other wheat supplies.

2. Forecast PNW Exports.

As defined, this means the foreign exports from Puget Sound and Columbia River ports. Recognize that this volume cannot exceed production minus some amount set aside for domestic consumption. A linear regression of PNW exports figures results in the formula y = a+bx where y = exports, x = the number of years from the base year 1960[*], a and b are constants equal to 2.72 and 0.41 respectively. This equation had an r2 of 0.89 where 1.0 would represent a perfect fit of the data. Based on this regression equation, PNW exports are expected to be as follows:

TABLE 11
EXPORT FORECAST

Year	PNW Exports (ST)
1980 (actual)	11,170,000
1990	14,898,000
1995	16,929,000
2000	18,959,000

The 19.0 Million ST projection for 2000 is 2.7 Million ST under four state production demonstrating that the historical quantity available for domestic consumption will still be available.

3. Project the quantity of PNW exports expected to pass through Bonneville Lock.

It is questionable whether a detailed study of transportation rates, costs and routings will provide a better basis for this projection than an examination of the prototype situation. With each extension of navigation there has been a substantial increase in the percentage of PNW exports handled by the river system. The system had leveled in the 17-18% range in 1960's and most of the 1970's represented a "transition" as new locks were opened and new transport modes were tried. The most detailed study of routings covered 1977 and shows that 45% of the wheat coming to the PNW came by barge. Examination of subsequent years shows that between 40 and 45% of PNW exports were passing through Bonneville Lock on their way to Lower Columbia River export terminals.

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[*] The base or zero year was 1960. Data used in the regression was 1961 through 1982.

We believe the most realistic way to approach the projection is to look at two bases for estimating the barge movement as a percent of total PNW exports.

- o Based on historical evidence, assume 45% of PNW exports will be moving by barge. This assumes that the maximum percent handled by barge in recent years represents a maturing of the system in the period since 1975 when the navigation system was completed.

- o Recognizing that truck movements from non-Oregon sources represented over 7% of deliveries to the PNW in 1977, while barge movements were capturing 45%, suggests there is still room for barge growth without requiring further modal shift from rail.

  As river facilities are upgraded, and fuel prices increase, it seems logical to assume that some share of the 7+% truck origins will get on barge. This fact, when combined with the short span of time available since 1975 to adjust shipping patterns and habits, suggest that projecting a 50% modal share for barge is not unrealistic.

Based on the above stated rationale, we project wheat movements through Bonneville Lock as follows (in short tons):

TABLE 12
WHEAT MOVEMENTS THROUGH BONNEVILLE LOCK - PROJECTED

Year	PNW Exports	Bonneville Lock	
		45%	50%
1980	11,955,000* (actual)		
1990	14,898,000	6,704,000	7,449,000
1995	16,929,000	7,618,000	8,464,000
2000	18,959,000	8,531,000	9,479,000

While we believe there is room for further growth after the year 2000, we have not projected it for two reasons. First, the basis for our extrapolations are the 22 year period 1960-1982. Thus, projecting beyond 22 years in the future becomes a questionable procedure. Secondly, sometime after the year 2000 the PNW could be approaching maximum acreages under production. While some researchers suggest a continuation of growth and even a surge in yields over the next 20 years, we chose the more conservative approach of leveling the projection at the year 2000 range.

All the above research focused on wheat, the principal PNW grain export. However, review of data suggests that historically and in recent years barley exports have been significant and have had a great influence on Bonneville Lock traffic. Records show there were large barley movements on the river in the early 1960's but then tapered off until they made a 5 to 10 fold increase in the early 1980's and grew to around 9% of total grain movements through Bonneville Lock. The feed grain movements to Pacific Rim nations have been growing rapidly and it is logical that barley movements will increase over the years. However, barley can compete with wheat for acreage, water and other resources. Thus, we decided not to attempt a separate projection of barley even though the 1981-1982 Bonneville Lock movements were substantial. However, we believe an additional 5% should be added to the Bonneville Lock projections to allow for movements of barley, oats and other grains based on the historic situation where other grains have accounted for between 2% and 9% of Bonneville Lock grain movements. Because of the uncertainty beyond the year 2000, we suggest using the high projection for the year 2000 for the years 2005 and beyond. This results in the projections shown in Table 13.

TABLE 13
GRAIN MOVEMENTS THROUGH BONNEVILLE LOCK - PROJECTED
(In 1000 short tons)

Year	Low	Planning Projection	High
1990	7,039	7,430	7,821
1995	7,998	8,442	8,887
2000	8,957	9,454	9,952
2005 & beyond		9,952	

Source: OGDEN BEEMAN & ASSOCIATES, INC.

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(1) U.S. Army Engineer District, Portland, Corps of Engineers, Feasibility Study for Modifying Lock, Bonneville Lock & Dam, OR & WA, 1977

(2) U.S. Army Engineer District, Portland Corps of Engineers, Feasibility Report Addendum, Bonneville Lock & Dam, OR & WA, 1981

(3) Beeman, Ogden & Associates, Oregon Port Study - 1980, MARAD, 1980

(4) Port of Portland, Columbia/Snake River System Ports Development Planning Study, 1982

(5) CH2M-Hill, et al, Washington State Ports System Update-1980, Washington Public Ports Association, 1980

(6) Northwest Agricultural Development Project, 1981, NEA

(7) Wheat Movements in the United States, North Central Regional Research Publication 2714, 1981.

COLUMBIA BASIN PROJECTS

STATEMENT OF HENRY SCHAFER, REPRESENTING THE COLUMBIA BASIN DEVELOPMENT LEAGUE

Chairman HATFIELD. Mr. Henry Schafer, who is representing the Columbia Basin Development League.

Mr. SCHAFER. I am Henry Schafer of Odessa, Wash., your neighboring State, speaking for the East, South, and Quincy Columbia Basin Irrigation Districts.

Last year, we celebrated the 50th anniversary of the construction of the Grand Coulee Dam. This dam was constructed under the Columbia Basin Act and was primarily considered as an irrigation structure to irrigate 1,029,000 acres and contracts signed with Columbia Basin Irrigation Districts to that effect.

Now, 50 years later, the project is almost half completed as irrigation was deferred and priority given to power production. With power development now in its last stages, we hope that completing the second half of the irrigation development will get back on schedule and are pleased that a small amount is included for surveys and planning. The environmental impact statement for the second half is well underway and public meetings for input in this statement showed overwhelming support for completion of this project.

The State of Washington, together with the Columbia Basin Irrigation Districts, farmers, labor, sportsmen, and the business community, all very much favor development of the second half of this project.

The Second Bacon Syphon and Tunnel, a primary structure for further development, together with the pumps at the dam, are already in place and should be utilized. This project has provided many benefits for the whole Nation and can provide many more.

It could provide major crops that we now import, such as sugar, beef, and grape products, and other crops for export.

The proposed budget has funds for ongoing drainage and the last small developments of the first half. We fully support the proposed budget and hope to have your support for these funds.

Thank you for your time and consideration.

Chairman HATFIELD. Thank you very much, Mr. Schafer.

Mr. SCHAFER. With your knowledge of the Columbia River basin, we didn't figure it was necessary to have a long, lengthy statement.

Chairman HATFIELD. Much of what little I know I heard from Senator Magnuson and his tutelage under this committee, and Senator Jackson and other members of the committee who represented that State. I am trying to pick up a little of the slack they left here. Thank you very much.

Mr. SCHAFER. Thank you, Senator.

[The statement follows:]

STATEMENT OF HENRY SCHAFER, VICE PRESIDENT, BOARD OF DIRECTORS, EAST COLUMBIA BASIN IRRIGATION DISTRICT, WASHINGTON

Dear Senator Hatfield, the East Columbia Basin Irrigation District enthusiastically supports the President's budget for the Columbia basin project for fiscal year 1985.

This appropriation will help complete several elements of the first half of the 1 million acre project. Completion of the block 26 laterals will provide irrigation water to an additional 13,000 acres located in one of the basin's most productive microclimates. The Bureau of Reclamation's drainage construction program is continuing to provide drainage conditions conducive to maximum agricultural production. Enlargement of the West Canal is ongoing and will allow the Quincy district to fully utilize the additional capacity made possible by the completion of the second Bacon siphon and tunnel.

Several elements of this appropriation will lead toward a timely decision regarding development of the second half of the project. Funding for final work on the pump-generator units at Grand Coulee Dam will provide hydroelectric peaking potential for the regional energy system and also provides the pumping capacity necessary for continuation of the project. This budget provides funds to complete the environmental impact statement for the second half of the project by some time in 1985. That study and review process will provide answers to many questions associated with completion of the project. The EIS process will also provide a forum for public discussion about the future of the project. This planning and decisionmaking process should be complete about the same time that funds currently committed to construction associated with the third powerplant at Grand Coulee Dam are winding down.

We sincerely appreciate the committee's support and thank you for the opportunity to present this testimony.

STATEMENT OF CHAN BAILEY, EXECUTIVE SECRETARY, COLUMBIA BASIN DEVELOPMENT LEAGUE, WASHINGTON

This testimony supports the Department of the Interior program for the Bureau of Reclamation on the Columbia basin project in Washington State. The fiscal year 1985 budget marks several milestones in the irrigation and energy development on the Columbia basin project. The completion of the block 26 lateral system will bring into production the final block of ground in the basin 37 years after the first ground-received water in 1948 and 50 years after its authorization by Congress.

This budget also completes and puts into operation the six pumpback generators at Grand Coulee Dam. These pump-generators have the pumping capacity to complete the second half of the project and supply peaking power to the Northwest energy system. The riverbank stabilization program puts the finishing touch on the third powerplant and marks the end of an era there.

The Columbia basin's ability to produce over 70 different crops on the irrigated portion, giving those farmers the opportunity to diversify with nonsurplus crops year after year with reliability, has proven the wisdom of putting water on the land. That is why we are particularly pleased to see a small amount in the budget to begin studies necessary for completion of the second half of the project. With 50 years bringing to a close completion of the first half we feel the commencing on the first phase of the last half is most appropriate at this time.

We ask for your support and approval and thank you for the opportunity to present this testimony.

STATEMENT OF RICHARD B. STEVENS, PRESIDENT, BOARD OF DIRECTORS, QUINCY-COLUMBIA BASIN IRRIGATION DISTRICT, WASHINGTON

Dear Senator Hatfield, the Quincy-Columbia Basin Irrigation District, one of the three irrigation districts comprising the Columbia basin project in the State of Washington, welcomes this opportunity to present its comments relating to the proposed budget for the Columbia basin project for the fiscal year 1985.

Inasmuch as the project is not yet completed, we are most pleased to observe the continuing appropriations for drainage construction and deferred and supplemental construction contained in the proposed budget. Expenditures such as this most certainly serve to preserve the integrity of the irrigation system throughout the repayment contract period.

It is also gratifying to note that funds have been appropriated for the continued studies for future Federal development of deferred and bypassed lands and the East High Canal irrigation system.

We also note with interest the funds budgeted for the Grand Coulee pumping-generating plant which will help supply power needs during periods of peak demand. It is anticipated that these expenditures, constituting a very wise investment, will be returned many times over to the United States.

To summarize, the directors of the Quincy District fully support the fiscal year 1985 proposed appropriations for the Columbia basin project and respectfully request your support in approving the proposed budget.

STATEMENT OF MERLE R. GIBBENS, SECRETARY-MANAGER, IRRIGATION AND DRAINAGE DIVISION, SOUTH COLUMBIA BASIN IRRIGATION DISTRICT, WASHINGTON

Dear Senator Hatfield, on behalf of the board of directors of the South Columbia Basin Irrigation District, I am pleased to inform you that we support the President's budget as it relates to energy and irrigation development on the Columbia basin project for fiscal year 1985. We particularly support those items budgeted for: Grand Coulee pumping and generating units No. P/G 9, 10, 11, and 12; irrigation block 26 laterals; drainage construction; and deferred and supplemental construction.

Irrigation block 26 lands are owned primarily by landowners whose lands in other parts of the project were found undesirable to develop or infeasible to drain and were allowed to exchange or purchase U.S.-owned lands in block 26 in lieu of drainage construction. Performance of the minor completion work on block 26 laterals will permit block 26 to enter initial development year in 1985.

On behalf of the board of directors and the landowners of this district, I thank you for your past cooperation and courtesies and look forward to the ultimate completion of the 1,029,000-acre Columbia basin project as originally authorized and reauthorized by Congress almost 49 years ago.

Columbia Basin Project Delegation

Henry Schafer, Odessa, Wash., director, East Columbia Basin Irrigation District; Bill Watson, Quincy, Wash., director, Quincy-Columbia Basin Irrigation District; Richard Stevens, Soap Lake, Wash., director, Quincy-Columbia Basin Irrigation District; Doyle Mathews, Pasco, Wash., director, South Columbia Basin Irrigation District; Paul Olberding, Connell, Wash., director, South Columbia Basin Irrigation District; Glen Fiedler, Olympia, Wash., assistant director—Water programs, department of ecology; Reid Phillips, Lind, Wash., vice president, Columbia Basin Development League; and Chan Bailey, Othello, Wash., executive secretary, Columbia Basin Development League.

Washington Navigation Projects

STATEMENT OF LEWIS HOLCOMB, DIRECTOR, WASHINGTON PUBLIC PORTS ASSOCIATION

ACCOMPANIED BY:

JOHN A. McCARTHY, COMMISSIONER, PORT OF TACOMA, WASH.

HENRY E. SOIKE, GENERAL MANAGER, PORT OF GRAYS HARBOR, WASH.

JOHN DOHRMANN, SENIOR ENVIRONMENTAL PLANNER, PORT OF SEATTLE, WASH.

Chairman HATFIELD. We will now hear from the Washington Public Ports Association.

Mr. HOLCOMB. My name is Lewis Holcomb, director of the Washington Public Ports Association. I want to merely introduce the panel, and so, taking no further time, I will do so.

On my left is the gentleman who is an elected commissioner of the Port of Tacoma, Mr. John McCarthy. On my immediate right is John Dohrmann, planner for Seattle. Our other witness is Henry Soike, general manager of the Port of Grays Harbor.

Mr. McCarthy will lead off.

Mr. MCCARTHY. Thank you, Mr. Chairman.

The Port of Tacoma is Washington State's exporting port, exporting more than 6 million tons of goods in 1983.

As a deep-water port, we are an essential link for the shipping of such strategic imports as alumina, copper, lead and zinc ores, and natural rubber. With our great inland transportation connections we are able to furnish the world marketplace with basic products like forest products and grains, as well as high value goods such as farm machinery and equipment, turbines, and locomotives.

BLAIR AND SITCUM WATERWAYS, WASH.

The Blair and Sitcum Waterways provide access to 19 Port of Tacoma berths. Unfortunately, the Blair Waterway is impeded by a bridge with a horizontal clearance of only 150 feet and a vertical clearance of just 14 feet when closed. Both the Blair and Sitcum Waterways are further hampered by a shallow draft.

In 1975, 9 years ago, following a complete feasibility study, the Corps of Engineers recommended to Congress that both the Blair and Sitcum Waterways be deepened to approximately 45 feet. They further recommended replacement of the Blair bridge with a new bridge having a 45-foot vertical and 300-foot horizontal clearance. Both economic and safety reasons were given for these recommendations, and in 1982 the Corps reaffirmed the necessity of the original analysis.

The 1982 feasibility report identified the need for $980,000 to complete the continuation of planning and engineering over a 3-year period. This committee approved an appropriation of $514,000 in fiscal year 1983 and $140,000 in fiscal year 1984. We are now eager to see CP&E completed on this project in fiscal year 1985 and are seeking your support in approving an appropriation of $326,000 to accomplish this task.

The economic benefit to our region as a result of the Blair-Sitcum project improvements will result in over 6,000 new jobs and $150 million to the Tacoma-Pierce County area by the year 2000. Failure to correct the hazards caused by the narrow bridge and shallow water threatens not only the future of this important commercial shipping link but the basic economy of our region as well.

I thank you very much for your attention, sir.

Chairman HATFIELD. Thank you very much.

Mr. HOLCOMB. Mr. Dohrmann.

DUWAMISH WATERWAY, WASH.

Mr. DOHRMANN. I am John Dohrmann, senior environmental planner for the Port of Seattle, testifying on our request for fiscal year 1985 funds for the Corps of Engineers to carry out continuation of planning and engineering work on the Duwamish Waterway navigation project. A total of $1.3 million is required for the continuation of planning and engineering before actual construction can begin. We believe that this work can be done in 2 years and that $800,000 could be utilized in fiscal year 1985. I, therefore, ask your consideration of this request.

Thank you.

Chairman HATFIELD. Thank you.

Mr. SOIKE. Senator, I appreciate the opportunity to testify. I would just like to submit my statement in support of the Port of Grays Harbor. I think the statement is testimony enough at this time. I recognize the hour is late. We will be looking forward to working with you and members of your staff in the future. Thank you.

Chairman HATFIELD. Your very presence here communicates a tremendous amount of interest in the project that I have worked with you on over the years. So I appreciate your thoughtfulness. We will incorporate your formal statements in the record. If I have any questions, which I doubt, I will be happy to call any one of you for added information.

Mr. SOIKE. Thank you.

Mr. HOLCOMB. Thank you for your time, sir.

[The statement follows:]

STATEMENT OF HENRY E. SOIKE, GENERAL MANAGER, PORT OF GRAYS HARBOR, WASH.

Mr. Chairman and members of the committee, my name is Henry E. Soike and I am the general manager of the Port of Grays Harbor which is Washington State's only deep-water coastal port.

Our navigation facilities provide the access link between Federal, State, and private timber resources and the Pacific rim countries of Japan, Korea, and the Peoples Republic of China.

While 1983 was not a particularly good year for the timber industry, we are pleased to report that waterborne shipments from Grays Harbor totaled 4,112,080 tons. This was the second highest volume of marine traffic in the 70-plus year history of our port.

In 1965 the Corps of Engineers initiated a study to determine the feasibility of increasing the existing 30-foot draft of our navigation channels. On December 14, 1982, the Board of Engineers recommended the project be authorized at 38 feet at an estimated cost of $86 million. This same feasibility report identified the need for $2.9 million to complete continuation of planning and engineering over a 3-year period. In fiscal year 1984, this committee approved an appropriation of $500,000 to initiate that work. This funding level was subsequently reduced to $300,000 by administrative action.

Our 1983 annual report reveals that 74 percent of the vessels departing from Grays Harbor exceeded the current project depth. This was accomplished only by overdredging berth areas and accepting vessel delays and sailing at maximum tide conditions.

We are anxious to see CP&E completed on this project. However, it is apparent to us that the administration's position on cost sharing and user fees has precluded identification of the Corps' fiscal year 1985 CP&E capability. We are attaching a copy of our letter dated September 9, 1982, which clearly identifies our position on local cost sharing and financial arrangements satisfactory to both the Congress and the administration.

We seek your support in approving an appropriation of $1.9 million in fiscal year 1985 to accomplish a meaningful level of CP&E on the Grays harbor deeper draft project.

the legislature of the State of Washington passed House Joint Memorial No. 33 by unanimous action on February 16, 1984. This memorial urges Congress to expedite the Grays Harbor navigation improvement project by enacting appropriate laws. A copy of this memorial is attached to this statement and we ask that it be included in the record.

I thank you for the opportunity to testify.

LETTER FROM HENRY E. SOIKE

SEPTEMBER 9, 1982.

Col. NORMAN C. HINTZ,
District Engineer, Corps of Engineers,
Seattle District, Seattle, Wash.

DEAR COLONEL HINTZ: This is an expression of intent by the Port of Grays Harbor, Wash., to cooperate with the Federal Government for the continuation of planning and engineering, and eventual construction, of the Grays Harbor deep-draft channel improvement project. Hopefully, the funding for the initiation of CP&E can be contained in the fiscal year 1984 Federal budget.

The Port of Grays Harbor endorses the project as contained in the final feasibility report and fully supports the traditional items of local cooperation as mandated by current legislation. We understand that project cost sharing and financing are under review by the administration and the Congress. The Port of Grays Harbor would support cost sharing and financing arrangements satisfactory to both Congress and the administration.

We urge every consideration be given to proceeding with the continuation of planning and engineering for the proposed navigation improvement project as soon as possible.

Sincerely,

H. E. SOIKE,
General Manager.

ENGROSSED HOUSE JOINT MEMORIAL NO. 33

STATE OF WASHINGTON, 48TH LEGISLATURE, 1984 REGULAR SESSION

By Representatives Vekich, Sayan, Fisch, McClure, Monohon, Betrozoff, Sanders and J. Williams

Prefiled with the Chief Clerk January 6, 1984. Read first time January 9, 1984 and referred to Committee on Natural Resources.

TO THE HONORABLE RONALD REAGAN, PRESIDENT OF THE UNITED STATES, AND TO THE PRESIDENT OF THE SENATE AND THE SPEAKER OF THE HOUSE OF REPRESENTATIVES, AND TO THE SENATE AND HOUSE OF REPRESENTATIVES OF THE UNITED STATES, IN CONGRESS ASSEMBLED:

We, your Memorialists, the Senate and House of Representatives of the State of Washington, in legislative session assembled, respectfully represent and petition as follows:

WHEREAS, Grays Harbor is the State of Washington's only deep water port on the outer coast; and

WHEREAS, The navigation channel serving the maritime interests in the Port of Grays Harbor is an important part of Washington State's transportation system, which includes highway and rail, as well as water; and

WHEREAS, The Grays Harbor navigation channel is a vital link in the transport of products from private, state, and federal forests to foreign markets; and

WHEREAS, Grays Harbor continues to be a major transshipment center for forest products to Japan, Korea, and the Peoples Republic of China. In fact, in 1983 Grays Harbor shipped the largest volume of forest products to mainland China of any United States port; and

WHEREAS, With the existing landside transportation system, including two mainline railroads and major state highways, the Grays Harbor navigation channel can play an even more important role in the future through expanded shipment of commodities from throughout the western half of the United States; and

WHEREAS, In this total regard, the Grays Harbor navigation channel together with its routine maintenance and periodic improvements are critical to the economy of multiple counties in southwest Washington State and, potentially, to multiple states throughout the western United States; and

WHEREAS, In order for Grays Harbor to remain a viable seaport, the navigation facilities must be able to serve increasingly larger, more economical vessels; and

WHEREAS, On July 9, 1965, the Port of Grays Harbor requested that a study of the feasibility of widening and deepening the Grays Harbor navigation channel be undertaken by the United States Army Corps of Engineers; and

WHEREAS, The Army Corps of Engineers have completed the feasibility study and final environmental impact statement on the proposal to widen and deepen the Grays Harbor navigation channel from −30 feet to −38 feet; and

WHEREAS, Both of these reports were carefully reviewed and approved by the Army Corps of Engineers Board of Engineers for Rivers and Harbors on December 14, 1982; and

WHEREAS, The Department of the Army, Office of the Chief of Engineers has yet to act on the Board of Engineers recommendation for approval of the Grays Harbor navigation improvement project;

NOW, THEREFORE, Your Memorialists respectfully pray that the United States Congress take action to move the Grays Harbor nevigation improvement project forward by requiring the Secretary of the Army to deliver to the Congress any and all studies, reports, and conclusions regarding the Grays Harbor project, and that Congress enact appropriate laws instructing the Army Corps of Engineers to proceed as expeditiously as practicable with the final engineering, design, and construction of the Grays Harbor navigation improvement project.

BE IT RESOLVED, That copies of this Memorial be immediately transmitted to the Honorable Ronald Reagan, President of the United States, the President of the United States Senate, the Speaker of the House of Representatives, and each member of Congress from the State of Washington.

STATEMENT OF JOHN DOHRMANN, SENIOR ENVIRONMENTAL PLANNER, PORT OF SEATTLE, WASH.

Mr. Chairman, I am John Dohrmann, senior environmental planner of the Port of Seattle, Wash. I am testifying on our request for fiscal year 1985 funds for the Corps of Engineers to carry out continuation of planning and engineering work on the Duwamish Waterway project in our port.

The Duwamisn project, with an estimated total Federal and local cost of $54.65 million, will provide a critical expansion of the Seattle Harbor facilities for shipping terminals, shipbuilding facilities, and other maritime industries. The Port of Seattle is a premier container port on the west coast and is the major transit point for general cargo for the northern part of the country. The Board of Engineers for Rivers and Harbors recommended approval in its July 18, 1983, report, and the final Chief of Engineers report is in preparation.

A total of $1.3 million is required for the continuation of planning and engineering before actual construction of the project can begin. We believe that this work can be done in 2 years and that $800,000 could be utilized in fiscal year 1985.

Continuation of work on the project is of critical importance to the Port of Seattle as we prepare for future growth in our traffic because of trade expansion with Pacific rim countries. We recognize that Congress is continuing its consideration of the best structure for funding and cost sharing on navigation improvement projects. We are involved in that effort and have stated our willingness to accept local cost sharing that is established by Congress and the executive branch. However, we believe that improvement projects such as the Duwamish should continue to move toward construction and not be delayed at this stage of the process.

Thank you.

STATEMENT OF JOHN A. MCCARTHY, COMMISSIONER, PORT OF TACOMA, WASH.

Mr. Chairman and members of the committee, my name is John McCarthy. I am a commissioner of the Port of Tacoma, which is Washington State's largest exporting port, exporting more than 6 million tons of goods in 1983.

As a deepwater port, we are an essential link for the shipping of such strategic imports as alumina, copper, lead, and zinc ores, and natural rubber. With our great inland transportation connections we are able to furnish the world marketplace with basic products like forest products and grains, as well as high-value goods such as farm machinery and equipment, turbines, and locomotives.

The Blair and Sitcum Waterways provide access to 19 Port of Tacoma berths. Unfortunately, the Blair Waterway is impeded by a bridge with a horizontal clearance of only 150 feet and a vertical clearance of just 14 feet when closed. Both the Blair and Sitcum Waterways are further hampered by a shallow draft.

In 1975, following a complete feasibility study, the Corps of Engineers recommended to Congress that both the Blair and Sitcum Waterways be deepened to approximately 45 feet below MLLW. They further recommended replacement of the Blair bridge with a new bridge having a 45-foot vertical and 300-foot horizontal clearance. Both economic and safety reasons were given for these recommendations, and in 1982, the Corps reaffirmed the necessity of the original analysis.

The 1982 feasibility report identified the need for $980,000 to complete the continuation of planning and engineering over a 3-year period. This committee approved an appropriation of $514,000 in fiscal year 1983 and $140,000 in fiscal year 1984. We are now eager to see CP&E completed on this project in fiscal year 1985 and are seeking your support in approving an appropriation of $326,000 to accomplish this task.

The economic benefit to our region as a result of the Blair-Sitcum project improvements will result in over 6,000 new jobs and $150 million to the Tacoma-Pierce County area by the year 2000. Failure to correct the hazards caused by the narrow bridge and shallow water threatens not only the future of this important commercial shipping link, but the basic economy of our region as well.

ADDITIONAL PREPARED STATEMENTS

Chairman HATFIELD. The subcommittee has received several additional statements related to the projects we have covered this afternoon which, if there is no objection, I will incorporate in the record at this point.

[The statements follow:]

STATEMENT OF ERNEST ROBISON, PRESIDENT, GREATER WENATCHEE IRRIGATION DISTRICT, WASHINGTON

The following information constitutes our testimony in support of the Greater Wenatchee Irrigation District's application for a loan under the Small Reclamation Projects Act (Public Law 84-984).

The Greater Wenatchee Irrigation District's Loan Application Report in final form was submitted to the Bureau of Reclamation in June of 1983. It has subsequently been approved by the Commissioner of the Bureau of Reclamation and is currently being reviewed by the Office of Management and Budget (OMB) by request of the Secretary of Interior. Our project schedule anticipates congressional approval this year and initial funding during Fiscal Year 1985.

When the Jobs Bill, H.R. 1718, was being developed in February 1983, Commissioner Broadbent of the Bureau of Reclamation (in testimony before your committee) listed the Greater Wenatchee Project as one suitable for funding and acceleration under that program. However, there were no new starts authorized under the Jobs Bill and consequently our project is as yet unfunded.

The Greater Wenatchee Irrigation District is located in the Columbia River Valley in Central Washington State and includes some 9,400 acres classed as irrigable by the Bureau of Reclamation. The predominant crop raised on District land is our famous Washington State Apples, with lesser amounts of pears and cherries. These are not crops that are in surplus. Introduction of modern farming techniques including sprinkler irrigation and wind machines for frost control has made portions of the original system inadequate (low pressure for sprinkling and water shortages during hot spells). To alleviate these problems, and to serve some new lands our project includes the following features:

1. Installation of additional pumps at five existing pumping plants
2. Construction of four new wells
3. Installation of approximately 20 miles of pipeline
4. Construction of 10 new pumping plants
5. Construction of a new storage reservoir and a peaking reservoir.

The estimated total project cost is $7,865,000. It is proposed to be funded by a District contribution of $1,298,000 and a Small Project Loan of $6,567,000.

The proposed project meets all of the requirements of the Small Reclamation Projects Act, and as we understand it, is a good example of the type of project that Congress intended to assist when it passed the Act in 1956. For committee members not familiar with the Act, it was passed "to encourage state and local participation in the development of projects under the Federal reclamation laws and to provide for Federal assistance..." It provides a way for local districts, by their own initiative, to plan and construct the smaller projects under the reclamation program, funded by loans fully repaid over a period determined by the Secretary of the Interior. This program has been in effect for more than 25 years and there have been no defaults on repayment contracts. The majority of projects in recent years have been for rehabilitation of older systems such as ours, and the program has been very effective in water and energy conservation.

We accept the cost sharing provisions of the Act as administered by the Bureau over the past 27 years. They fall within the expressed policies of the Secretary of Interior and President of the United States. We are concerned, however, that OMB has had our report for some time and that this process may further delay the Secretary's submittal of the report to Congress. The reason the report has gone to OMB for review is that the project has been placed in what the Department of Interior refers to as a "Category 2 Project," which in our opinion, appears to be an arbitrary designation and is contrary to the intent of the Act. In establishing this arbitrary category, we are of the opinion that OMB is ignoring many indirect benefits resulting from the overall project.

Our economy is totally dependent on agriculture, which is made possible by the availability of water. Unless something is done to improve our irrigation systems--to protect and conserve this resource--we cannot fully utilize our land and get full production.

The schedule for funding calls for the following Federal and District contributions:

	Fiscal Years (October-September)			
	1985	1986	1987	Total
Federal Funds	$1,324,000	$3,276,000	$1,967,000	$6,567,000
Applicant's Contribution	470,000	524,000	304,000	1,298,000
Total	$1,794,000	$3,800,000	$2,271,000	$7,865,000

We request that an appropriation of $1,324,000 be made for FY 1985. With this, we can initiate design of the project soon using our local funds and begin construction in the winter of 1984-'85.

Also, we understand that two bills were introduced last year that proposed an extension of the authorization ceiling under the Small Projects program because current applications in process would exhaust the existing ceiling. We therefore ask your support for passage of S.1981 and H.R. 444, which would raise the ceiling over the present limit to allow continuation of this valuable program.

Thank you very much for your assistance on our project.

STATEMENT OF BLAINE J. GAMBLE, PRESIDENT, NORTH CACHE WATER DEVELOPMENT PROJECT, IDAHO

This constitutes our testimony in support of the North Cache Water Development Project. As sponsor for the administration of the project, my company speaks in behalf of the other participants: Preston, Riverdale, and Mink Creek Canal Company; the Cub River Irrigation Company; and the Preston-Whitney Reservoir Company.

The Preston Whitney Irrigation Company, in cooperation with the other canal and reservoir companies, has applied to the Bureau of Reclamation to fund the North Cache Water Development Project under the Small Reclamation Projects Act of 1956 as amended (P.L. 84-984). The project report was submitted to the Commissioner of Reclamation in February 1983, was approved by him, and is currently being reviewed by the Office of Management and Budget (OMB) by request of the Secretary of Interior. Our project schedule had anticipated congressional approval last year and initial funding during Fiscal Year 1984. This did not occur, and since time is of the essence, we are concerned that cost escalations resulting from delay in construction will jeopardize our project.

You may recall that on February 22, 1983, Commissioner Broadbent (in testimony before your committee) listed the North Cache Water Development Project as one on which construction could be accelerated by the funds provided under the Jobs Bill, H.R. 1718. Apparently, insufficient funds were made available to reclamation because when the Secretary announced the projects to be funded, North Cache was not among them nor were there any other new starts.

The North Cache Water Development Project is located in southeastern Idaho with a small portion of one of the canal companies extending into northwestern Utah. We propose the complete rehabilitation of a very old open ditch irrigation system by converting it to a gravity pressurized pipe system. Our systems serve water to about 22,000 acres in Cache Valley--a typical rural agricultural community that relies on water for its economic base. Local, regional, and other benefits from the project can be summarized as follows:

- Eliminate individual sprinkler pumps and conserve 5,000 kW of power
- Eliminate the annual consumption of 7 million kWh of energy, equivalent to 11,000 barrels of oil per year
- Eliminate localized high water tables and reclaim land along and adjacent to the canals
- Gain better control of water management for more efficient use of the water resources available to the area
- Eliminate open ditch safety hazards

The principal improvements needed include 60 miles of gravity pipe system, varying from 14 to 60 inches in diameter, safety improvements to four existing dams, and miscellaneous control and diversion structures. The estimated total project cost is $30,080,000, with a district contribution of $4,181,000 and a Small Project Loan of $25,899,000.

The proposed project meets all of the requirements of the Small Reclamation Projects Act, and as we understand it, is a good example of the type of project that Congress intended to assist when it passed the Act in 1956. For committee members not familiar with the Act, it was passed "to encourage state and local participation in the development of projects under the Federal reclamation laws and to provide for Federal assistance...." It provides a way for local districts, by their own initiative, to plan and construct the smaller projects under the reclamation program, funded by loans fully repaid over a period determined by the Secretary of the Interior. This program has been in effect for more than 25 years and there have been no defaults on repayment contracts. The majority of projects in recent years have been for rehabilitation of older systems such as ours, and the program has been very effective in water and energy conservation.

We accept the cost sharing provisions of the Act as administered by the Bureau over the past 27 years. They fall within the expressed policies of the Secretary of Interior and President of the United States. We are concerned, however, that OMB has had our report for a number months and that this process may further delay the Secretary's submittal of the report to Congress. The reason the report has gone to OMB for review is that the project has been placed in what the department refers to as a "Category 2 Project," which in our opinion, appears to be an arbitrary designation and is contrary to the intent of the Act. In establishing this arbitrary category, we are of the opinion that OMB is ignoring many indirect benefits resulting from the overall project.

Our valley is totally dependent on agriculture, which is made possible by the availability of water. Unless something is done to improve our systems--to protect and conserve this resource--we stand to lose our economic base.

The original schedule for funding called for the following federal and district contributions:

	Fiscal Years (October-September)			
	1984	1985	1986	Total
Federal Funds	$4,043,000	$14,576,000	$7,280,000	$25,899,000
Applicant's Contribution	653,000	2,353,000	1,175,000	4,181,000
Total	$4,696,000	$16,929,000	$8,455,000	$30,080,000

Recognizing budget constraints and the delays already experienced in our schedule, we request that an appropriation of $500,000 be made for FY 1985. With this, we can initiate design of the project next winter and begin construction in the fall of 1985.

Also, we understand that two bills were introduced last year that proposed an extension of the authorization ceiling under the Small Projects program because current applications in process would exhaust the existing ceiling. We therefore ask your support for passage of S. 1981 and H.R. 4444, which would raise the ceiling over the present limit to allow continuation of this valuable program.

Thank you very much for your assistance on our project. We look forward to getting it back on schedule.

COLUMBIA DAM, TENN.—OPPOSITION

STATEMENT OF ALVIN H. HARDT, SHELBYVILLE, TENN.

Dear sirs: I understand your committee may hold hearings regarding the possibility of completing the Columbia Dam on the Duck River in Tennessee.

I wish to state that many people in this area, probably a majority, are not in favor of completing this dam. I feel that the executive director of this project, Mr. Claybourne Ross, and he alone, is stirring up people and their feelings in support of this dam project.

This dam was budgeted to cost $140 million to build. It has now cost $260 million, and would cost $140 million more to complete it.

There never was a need for the Columbia Dam, or for the Normandy Dam which was completed. There is no flooding in the Columbia area, nor is there a need for water. Only a few people who go boating or fishing would benefit.

I hope you refuse to approve wasting more money on the Columbia Dam.

SUBCOMMITTEE RECESS

Chairman HATFIELD. The hearing is recessed until 10 o'clock tomorrow.

[Whereupon, at 3:50 p.m. Tuesday, April 3, the subcommittee was recessed to reconvene at 10 a.m. Wednesday, April 4.]

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